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FLORIDA MORBIDITY STATISTICS 1980

STATE OF FLORIDA
DEPARTMENT OF HEALTH and
REHABILITATIVE SERVICES

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INTRODUCTION

This is the 36th edition of Florida Morbidity Statistics and continues the series begun in 1945. Data on the reported incidence of notifiable communicable diseases are presented. Some unpublished records for the years 1918 through 1944 are available upon request from the Epidemiology/Communicable Disease Program.

SOURCES OF DATA

Data in this report are based on case reports furnished to county health units by private physicians, hospitals, and others. Other sources of data include death certificates and laboratory reports which are checked routinely for previously-unreported cases of notifiable diseases.

Reports of such cases are investigated by county health unit personnel, confirmed as a case and, in turn, reported to the Epidemiology/Communicable Disease Program.

The population figures used in calculating the case rates for certain diseases are estimated by the Bureau of Economic and Business Research, College of Business Administration, University of Florida.

DIAGNOSIS

Individual case reports are verified as being a case of the disease reported by investigations conducted by county health unit personnel. Most cases are physician-diagnosed and have appropriate laboratory verification. Individual case investigation forms are forwarded to the Epidemiology/Communicable Disease Program Office for review and, in some instances, forwarded to the Centers for Disease Control.

RESIDENCE

Occurrence of cases by county is usually reported by the residence of the case since the normal place of residence is the county in which the disease was acquired. Those reports originating from hospitals and other places outside the county of residence are credited to the county of usual residence.

ACKNOWLEDGMENTS

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Special thanks go to Departmental employees in the Immunization Program, the Venereal Disease Control Program, and the Tuberculosis Control Program for their efforts in the prevention, surveillance, and control of communicable diseases, especially: Clifford H. Cole, M.D., M.P.H., Director, Tuberculosis Control Services; Larry A. Dodd, Coordinator, Immunization Program; and Jack Wroten, Chief, Venereal Disease Control Program.

The HRS Office of Public Information is thanked especially for its assistance in the preparation of selected graphic services in this report.

Further acknowledgment is made to HRS districts and county health units for their collective efforts in the statewide communicable disease morbidity surveillance and reporting system. The participation of physicians, hospitals, nurses, sanitarians, infection control nurses, epidemiology/communicable disease specialists, communicable disease report persons, and clerical staff is likewise greatly appreciated.

EPI-NOTES AND MORBIDITY AND MORTALITY WEEKLY REPORT (MMWR) ARTICLES**

Cholera **

A case of cholera has been reported from Florida.

The patient, a 46-year-old woman, experienced the sudden onset of explosive diarrhea, abdominal cramps, and vomiting on November 29, 1980. There was only minimal fever. The illness was assumed to be food poisoning and was treated symptomatically. Symptoms continued unabated, however, and on the third day of illness, her physician ordered a stool culture and started the patient on oral tetracycline. Within 2 days the diarrhea had ceased, and the patient was markedly improved. The treatment with tetracycline was continued. A stool culture grew a toxigenic Vibrio cholerae, serotype Inaba, biotype El Tor.

From November 21-25, the patient had ingested approximately six dozen raw oysters. These had been harvested from an approved area of Apalachicola Bay in Florida on November 17 or 19. No other seafood ingestion was reported, and the patient had not traveled recently outside of western Florida. An epidemiologic investigation is under way to determine if the oysters were the vehicle of transmission and if there were other cases. Thus far no other cases have been detected. During the past two months, routine monitoring of the portions of Apalachicola Bay that are approved and open for oyster harvesting has shown fecal coliform levels to be within the limits required by the National Shellfish Sanitation Program.

Editorial Note: The last cases of cholera reported in the United States in persons who had not recently traveled out of the country occurred in Louisiana in 1978 (1). In those cases, ingestion of steamed crabs was epidemiologically associated with infection. The Louisiana isolates were also serotype Inaba and biotype El Tor. The Florida and Louisiana strains will be compared by phage typing and other methods to determine if they are identical.

Reference

1. Blake PA, Allegra DT, Snyder JD, et al. Cholera - a possible endemic focus in the United States. N Engl J Med 1980;302:305-9.

Chromobacteriosis **

On July 20, 1980, a 49-year-old man was seen by a local physician because of right upper-quadrant pain, malaise, night sweats, and a 5- to 10-lb. weight loss. An interview with the patient revealed that though he was previously in good health and did not have a history of gallbladder disease, tuberculosis, or hepatitis, he had been involved in an accident six weeks previously in which he had nearly drowned.

On hospital admission, the patient had a temperature of 99.6 F (37.5 C); his blood pressure was 130/80mm Hg. The heart and lungs were normal. An admission chest X-ray was normal. The abdomen was diffusely tender without rebound. The patient underwent an intravenous cholangiogram and had a barium enema; both were negative.

His temperature subsequently rose to 105.3 F (40.7 C), and he developed a fine, generalized maculopapular rash that affected all skin surfaces except his face, hands, and feet. A repeat abdominal examination showed generalized abdominal rigidity with rebound tenderness in the right upper quadrant. A complete blood count showed 3,300 white blood cells/mm^3, with 46% neutrophils and 36% bands. A Gram stain of the skin lesions revealed gram-negative rods. He was started on chloramphenicol, ticarcillin, and gentamicin. Because of the likelihood of an intraabdominal abscess, an exploratory laparotomy was performed; it did not reveal any remarkable findings. All cultures of the skin and blood grew Chromobacterium violaceum. The patient subsequently developed bilateral pneumonia, but cultures of the sputum obtained after institution of antibiotics were negative. Within a few days of therapy, the patient improved gradually, but his liver function tests deteriorated. A liver scan revealed multiple abscesses. Antibiotic therapy was continued for 24 days. A repeat liver scan and chest X-ray showed complete resolution of the multiple abscesses and the pnuemonia, respectively. Upon discharge, however, the patient continued to take oral doxycycline for two more weeks.

Editorial Note: Systemic infection caused by C. violaceum, an aerobic gram-negative bacillus, is extremely rare. Cases have been reported only from tropical and subtropical climates, particularly from Southeast Asia. One near-fatal and two fatal infections were reported in American soldiers serving in Vietnam (1). Nine cases have been reported from the United States, all from the Southeast, seven in Florida alone (Table 1). In addition, six other isolates from blood specimens have been received at CDC. These also were submitted from hospitals located in southeastern states.

TABLE 1. Reported cases of Chromobacterium violaceum infection, United States, 1938-1980

Year of onset	Age	Sex	State of exposure	Possible predisposing factors	Clinical features	Outcome	Reference
1938	6	M	Florida	Played in muddy water	Skin ulcers; sepsis	Died	2
1939	15	F	Florida	Unknown	Sepsis; lymphadenitis	Died	3
1941	21	M	Louisiana	Minor trauma to foot	Sepsis; pneumonia; liver abscess	Died	4
1968	6	M	Louisiana	Played in ditch	Pneumonia; liver abscess	Died	5
1968	25	M	Florida	Minor knee trauma at beach	Sepsis; multiple abscesses	Died	6
1971	9	F	Florida (South Carolina?)	Foot puncture	Liver/lung abscesses	Died	7
1974	17	F	Florida	Breast surgery	Sepsis; breast abscess	Survived	8
1974	15	M	Florida	Went barefoot often	Sepsis; liver/lung abscesses	Died	9
1980	49	M	Florida	Near drowning (fresh water)	Sepsis; pneumonia; liver abscesses	Survived	Present case

C. violaceum has been isolated from soil and water samples in the southeastern United States. The organism is thought to enter patients primarily through minor trauma to the skin, although ingestion of untreated water has also been suggested. The subsequent clinical illness is severe and frequently fatal. The combination of sepsis and multiple liver abscesses in a patient residing in the Southeast should alert the physician to the possibility of infection caused by C. violaceum.

Optimal treatment should include surgical drainage of large abscesses, when necessary, in combination with appropriate antibiotic therapy. All isolates, to date, have been uniformly susceptible to chloramphenicol and resistant to the penicillins and cephalothin.

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Hepatitis B Associated with Acupuncture**

During the period February-May 1980, four cases of hepatitis B were reported among persons who had recently received acupuncture at a chiropractic clinic in Orange County, Florida. On May 30, the local health unit requested that the Florida State Department of Health and Rehabilitative Services assist in an investigation.

The investigation included 1) checking the clinic roster, which listed all persons who had attended the clinic against a list of reported cases of hepatitis for Orange County and the three surrounding counties, 2) reviewing the hepatitis patients' histories of acupuncture to determine common dates of exposure, 3) serologic testing of persons exposed during these periods, and 4) examination of the disinfection and sterilization procedures of the clinic.

A review of the records of the clinic revealed that 511 persons (clinic attendees) had been seen from October 1978, when it opened, through April 1980. Of these, 103 had received acupuncture, many on multiple occasions. Comparing the clinic roster with reported cases of hepatitis identified two additional clinic attendees with hepatitis B.

All six clinic attendees reported to have hepatitis B had the following: an acute illness compatible with acute hepatitis B, serum glutamic oxaloacetic transaminase (SGOT) levels more than ten times the upper limit of normal, and positive serologic tests for hepatitis B surface antigen (HBsAg). Two were clinically jaundiced, and three were hospitalized. The median age of patients was 58 years (range 38 - 71 years). Five of the patients were female. All six patients had had acupuncture at the clinic. None had any other known or likely exposure to hepatitis B virus (HBV) in the six months before onset of illness. Whereas six of 103 attendees who had acupuncture developed hepatitis, none of the clinic attendees who did not have acupuncture were reported as having hepatitis ($p < 10^{-4}$ Fisher exact test).

Patients had common dates of acupuncture occurring in two clusters (Figure 1). Dates of onset of illness were consistent with exposure on November 27 or 28, 1979 (first cluster), for patients #1 - #3, and on February 19 or 20, 1980 (second cluster), for patients #4 - #6; incubation periods ranged from 61 to 95 days.

In addition to these six patients, four other clinic attendees had acupuncture during these common exposure periods. Two persons who had acupuncture November 27 or 28 could not be reached for follow-up. The other two had acupuncture then and again February 19 or 20, but they remained asymptomatic. When serum specimens from these two were tested, one had no markers of HBV infection; the second contained only antibody to hepatitis B core antigen (anti-HBc), indicating HBV infection. Serum specimens from the two chiropractic physicians who administered the acupuncture were tested for hepatitis B surface antigen only; both were negative. HBV subtyping on specimens from patients #2 and #5 showed that both had subtype adw.

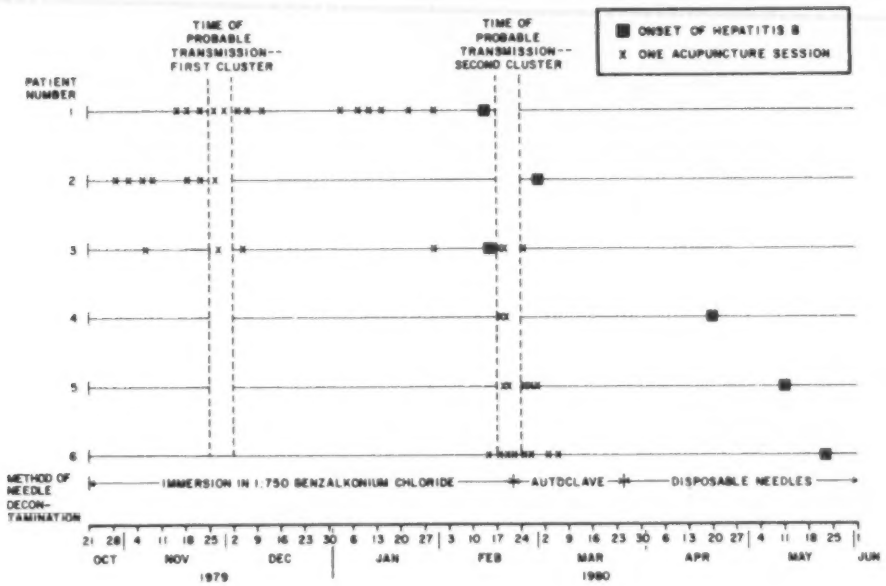
Until March 28, 1980, the clinic decontaminated traditional solid metal acupuncture needles by immersing them overnight in a 1:750 solution of benzalkonium chloride or by sterilizing them with steam under pressure (autoclaving). All six patients had had acupuncture treatments during periods when acupuncture needles were decontaminated by immersing them in the benzalkonium chloride solution (Figure 1). Beginning March 28, only disposable acupuncture needles were used.

Editorial Note: This outbreak was probably caused by an unidentified person who was infected with HBV and had acupuncture at the clinic the week beginning November 25, 1979. This person then became the source of HBV contamination of acupuncture needles, resulting in a cluster of three cases in persons who had acupuncture November 27 or 28, 1979. One of these, patient #3, who became

ill on February 15, 1980, had acupuncture again on February 18 or 19, which presumably resulted in acupuncture needles again being contaminated with HBV. This contamination probably led to a second cluster of three cases in persons who had acupuncture on February 19 or 20. Such a sequence of transmission for the second cluster of cases implies that HBV remained infective on the surface of acupuncture needles for at least one day, despite overnight immersion in the benzalkonium chloride solution.

Solutions of benzalkonium chloride and other quaternary ammonium compounds are low-level disinfectants and should never be used when the intent of a procedure is sterilization. For all types of contamination involving heat-stable equipment, such as acupuncture needles, the simplest, cheapest, and most effective method of sterilization is steam autoclaving (121 C for 15 minutes), after thorough physical cleaning (1).

FIGURE 1. Hepatitis B cases associated with a chiropractic clinic, by exposure to acupuncture and date of onset, Florida, October 1979-June 1980



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1. WW Bond, MJ Peterson, MS Favero. Viral hepatitis B: aspects of environmental control. Health Laboratory Science 1977;14:235-52.

Measles **

In the period March 20-April 16, 1980, an outbreak of measles was reported in an elementary school in Volusia County, Florida. All cases had a generalized maculopapular rash of ≥ 3 days' duration, temperature ≥ 101 F (39.3 C), and at least one of the following: cough, coryza, or conjunctivitis.

The Florida State Department of Health and Rehabilitative Services began an epidemiologic investigation on April 7 following reports of 14 cases in children that attended the same school. Surveillance for cases included 1) calling local pediatricians and hospital emergency-room staff, 2) publicizing the outbreak through the media, and 3) distributing questionnaires concerning rash illnesses to the families of school children. Questionnaires were completed for 80% of the 1,146 students enrolled in the school. All of the children with rash illnesses at that school were interviewed to verify the illness as measles. Two cases were confirmed serologically by measles hemagglutination-inhibition antibody testing.

A total of 39 cases of measles were identified in the school. The sources of initial reporting of cases were 1) private physicians, 69%; 2) school questionnaires, 10%; 3) the health department clinic, 10%; 4) parents, 5%; 5) hospitals, 3%; and 6) the school "sick room" log, 3%. The index case in the school, whose source of illness could not be determined, occurred in a 10-year old fourth-grade student. He had onset of fever, cough, coryza, and conjunctivitis on March 17; his rash began on March 20 (Figure 2). Cases continued to occur until April 16, although most (92%) occurred in the period March 28-April 7.

Substantial transmission probably took place on March 17 at a school concert, when the first and fourth grades were seated together for a half-hour period. Transmission may also have occurred at lunch since both grades lunched together.

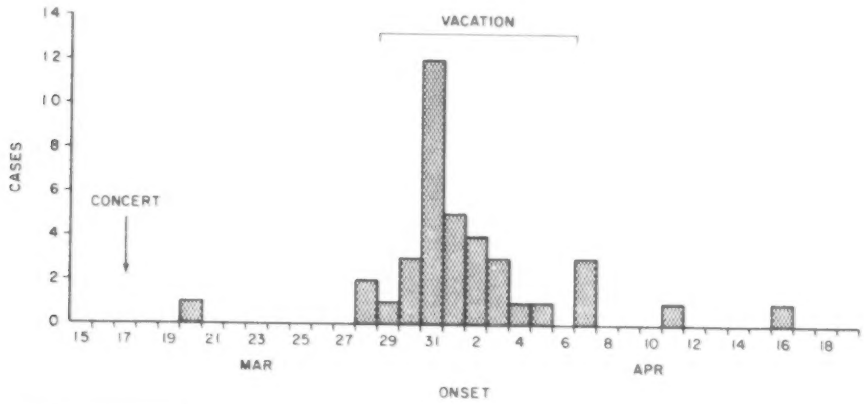
An evaluation of measles vaccine effectiveness by month of age at the time of vaccination was conducted for the first- and fourth-grade students because attack rates were highest in these classes (7.8% and 7.4%, respectively). School immunization records were reviewed to determine the precise month of vaccination for both ill and well children. The highest attack rates occurred in persons vaccinated before 12 months of age, followed by persons vaccinated at 12 months. There were no statistically significant differences between measles attack rates by the month of age at which persons were vaccinated (Table 2).

Editorial Note: This outbreak illustrates the importance of intensive case ascertainment. If physicians alone had been contacted, approximately 30% of the cases would not have been reported.

Although the difference in attack rates for those vaccinated against measles at 12 months of age versus those vaccinated at an older age was not statistically significant, a similar increased relative risk of measles in those vaccinated at 12 months of age has been observed in at least four other outbreaks (1-4). In none of these outbreaks were the differences statistically significant. One of the reasons for not observing a statistical difference in this investigation or in the other four outbreaks investigated may be the small size of the populations studied. In the Florida investigation, if the attack rate in persons vaccinated at ≥ 15 months of age were held constant and the attack rate

in persons vaccinated at 12 months varied, the smallest statistically significant relative risk would be 2.4. Even though there were no significant differences in these five outbreaks, the fact that all these studies of clinical vaccine efficacy show the same trends implies that vaccination at 12 months of age has a slightly lower efficacy than vaccination at an older age. As further evidence, another study noted a stepwise decrease in relative risks by month of age of vaccination from 12 months to ≥ 15 months (5), and two other investigations of outbreaks have shown either a statistically significant or borderline significant increased risk in persons vaccinated at 12 months of age compared to an older age (6, 7). Thus, all of these data are consistent with the Immunization Practices Advisory Committee (ACIP) recommendation that the optimal age for measles vaccination is 15 months. The data also show that the differences in vaccine efficacy between persons vaccinated at 12 months of age versus older ages are small, supporting the ACIP recommendation that persons vaccinated at 12 months need not be routinely revaccinated.

FIGURE 2. Measles cases, by date of rash onset,* Volusia County, Florida, March 15-April 19, 1980



*Unknown for 1 patient.

*Unknown for one patient.

TABLE 2. Comparative efficacy of measles vaccine, by age at vaccination, Florida, 1980

Age at vaccination (months)	Number of vaccine failures	Number of vaccine successes	Attack rate (%)	Relative risk*	P value
≥12	5	32	13.5	2.17	NS+
12	10	89	10.1	1.63	NS
13-14	2	43	4.4	0.17	NS
≥15	9	137	6.2	1.00	

*Relative to the risk for persons vaccinated at ≥15 months of age.
+Not significant.

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Norwalk Virus Gastroenteritis on a College Campus

During the period November 3 - 7, 1980, an explosive outbreak of Norwalk virus gastroenteritis affected 250 students at a small, private college (1,000 student enrollment) in Pasco County. The illness was characterized by diarrhea, nausea, vomiting, headache, weakness, cramps, chills, and low-grade fever, was generally mild to moderate, and lasted one to two days. The illness rate among student respondents was 40% and the epidemic curve suggested person-

to-person transmission and no common source was identified.

In addition to person-to-person transmission, one of the campus cafeterias may have been the source of foodborne transmission for some students. Tossed salad served at one such cafeteria meal was implicated as a vehicle of transmission ($p < .001$). Eating the tossed salad accounted for the majority (61%) of cases of illness that later developed in students who had consumed the meal. Onset of illness associated with eating tossed salad was clustered in the day following exposure. No break in food hygiene or other obvious source of contamination was identified.

Bacteriologic studies of enteric specimens were negative. Serologic testing of paired serum specimens of 12 students showed a four-fold rise in antibody titer to Norwalk antigen in five of six cases and in one of six non-cases ($p = .04$), confirming a Norwalk virus as the etiology of this outbreak.

Norwalk Virus Gastroenteritis Following Raw Oyster Consumption

In January 1980, six of 13 (46%) persons attending a party became ill with Norwalk virus gastroenteritis after eating raw oysters. Symptoms experienced by ill persons were principally nausea (100%), vomiting (83%), and diarrhea (50%) and were of brief duration. The symptom complex and epidemiology of Norwalk virus infection closely resemble gastrointestinal illness commonly referred to as the 24-hour intestinal or "stomach flu". Norwalk virus infection was identified in this outbreak by application of a recently developed sensitive and specific serologic radioimmunoassay (RIA). Oysters from the incriminated batch had fecal coliform levels above recommended standards; however, recent studies of oyster-harvesting waters have shown only a weak correlation between fecal coliforms and the presence of enteric viruses. Further studies are needed to determine whether modifications of monitoring modalities for oyster-harvesting waters are needed.

Raccoon Rabies **

On April 25, 1980, a pet raccoon that had had contact with 150 children and adults during the previous seven months was diagnosed as rabid by fluorescent-antibody (FA) examination of brain tissue. The animal had exhibited its first signs of illness on April 21. Exposure histories were obtained for persons who had had contact with the animal during the 60 days before it became ill, and postexposure prophylaxis with human rabies immune globulin (HRIG) and duck embryo vaccine (DEV) was recommended for 74 persons. Seventy-one persons received a complete postexposure vaccination series of HRIG and 23 doses of DEV. The 74 exposures were bites (10), scratches (23), licks (17), petting only (16), other* (6), and unknown (2). Of these 74 exposures, 52 (70%) occurred in school, 9 (12%) at home, 1 (1%) in another setting, and 12 (16%) in unknown sites. There were 43 males (58%) and 31 females exposed; most of those exposed (72%) were 13 to 15 years old (range 10-63 years).

*Included feeding, holding, or touching the animal.

The raccoon had been found in the woods in Okaloosa County, Florida, on September 15, 1979. It was taken into a home, and a pet collar was placed on its neck. However, the animal soon was released, and it stayed in the general vicinity, begging food. On November 15, a nearby shopkeeper and his wife, assuming, because of the raccoon's collar, that it was someone's lost pet and therefore safe to keep, took it in as a house pet.

After that date, the raccoon was in captivity and was not free to roam. However, it escaped for a 24-hour period during the first week of January 1980. On April 21, it began to exhibit aggressive behavior, anorexia, choking, and staggering, and it was taken to a veterinarian. It bit the veterinarian and his assistant before it was killed and examined. FA tests of brain specimens were positive for rabies virus. The animal had never been vaccinated.

Exposure to this rabid animal resulted in the administration of 554 cc of HRIG @ $18.29 per cc, or $10,132, plus 1,883 doses of DEV @ $2.97 per cc, or $5,592. The estimated cost for physicians, nurses, and local epidemiologic investigative time was $4,440 ($60 minimum per exposed person). In addition, the estimated cost for persons counseled but not considered exposed was $1,460 ($20 per person). Thus, the minimum estimated cost for this exposure to a pet raccoon was $21,624, a figure which does not include the time of state and federal epidemiologic and laboratory personnel.

Editorial Note: This incident is noteworthy for several reasons. First, it points out once again the potential hazard of harboring wild animals as pets. There is no way to determine if an animal caught in the wild is incubating rabies. Secondly, this episode illustrates the need to assess possible exposures to avoid overtreatment. Many of the persons treated in this incident were probably not exposed to the virus. As noted in the ACIP Recommendations on Rabies Prevention (1), exposure is defined as contamination of scratches, abrasions, open wounds, or mucous membranes with infectious saliva. Petting, per se, is specifically noted as a non-exposure. Rabies virus cannot penetrate unbroken skin, and this must be kept in mind in determining exposure potential. Finally, this episode illustrates that the pathogenesis of rabies in wildlife is still incompletely understood, a fact which affects treatment. Persons were treated who had been "exposed" as long as 60 days before the raccoon's onset of illness because the period of preclinical shedding for wildlife is unknown, although some data would suggest that it is short (i.e., less than three weeks). By contrast, persons exposed to rabid dogs and cats are only treated if their exposure was up to 10 days before the animal's onset of illness because it is known that dogs and cats shed virus for only a few days before illness develops.

The decision in this case to use a 60-day risk period cannot be medically challenged although it may have resulted in unnecessary treatment. Given the present inability to prevent or recognize rabies in wild animals and the increasing frequency with which pet wildlife are being found rabid, it is strongly recommended that wild animals not be harbored as pets.

Reference

1. MMWR 1980;29:265-72, 277-80.

Rickettsial Disease

On September 18, 1980, a 30 year-old resident of Palm Beach County was struck in the right eye by body parts and fluid of a tick he was removing from a Florida Gopher Tortoise. Six days later he developed conjunctivitis in his right eye, fever (102°F), chills, headaches, and myalgia. The patient was hospitalized for conjunctival exploration and treatment. On the evening of admission the patient was taken to the operating room and the conjunctiva was explored under anesthesia. Biopsies of the bulbar and tarsal conjunctivae were made at that time. Treatment, consisting of 500 mg. of tetracycline orally every six hours, was begun and symptoms resolved rapidly. Test for indirect fluorescent antibody (IFA) titers to spotted fever group antigen, (commonly used as a test for rocky mountain spotted fever) were negative on serum obtained September 25 (two days after onset), and positive with a titer 1:128 in serum obtained October 8. These results were obtained by the Florida State Virology Laboratory and were confirmed by the Rickettsial Branch, Bureau of Laboratories, Centers for Disease Control.

Although other potential exposures to Rickettsia existed (the patient lived with four dogs in a wooded area) the history suggested the tick from the tortoise was the source of the patient's infection. The patient had no recent travel to a known endemic area. It appears that this Rickettsial infection was acquired from a source in Florida.

An Outbreak of Salmonellosis in a Day-Care Center***

From August to September, 1980, Salmonella schwarzengrund was isolated from the stools of 14 of 61 children who attended a Day-Care Center (DCC) in northwest Florida. The median age of the infected children was two years (range one year to three years). Nine of the 14 culture-positive children had diarrhea or other gastrointestinal symptoms. The onset of illness, determined for seven children continued over a 24-day period from August 20 to September 13. Fecal cultures from the 26 employees revealed that one teacher was also asymptomatically infected, but none of the infected children had been assigned to this teacher's classroom. While data on how the Salmonella was introduced were not obtainable, the length of time between onset dates, the clustering of cases among certain age groups, and the lack of illness among staff suggested that S. schwarzengrund was transmitted person-to-person after it was introduced into the DCC.

The DCC in which the outbreak occurred had an enrollment of 182 children (age range two months to five years). All children ate food prepared in a common kitchen. Infants, among whom there was no case, were separated from the other children in a room that had its own hot water connections. The other children and staff used cold water handwashing facilities available outside their classrooms.

The outbreak was managed by excluding all culture-positive children from the DCC while they were symptomatic. Those children who were asymptomatic but still infected were isolated from other children in a separate room in the DCC,

and the staff were provided additional instruction in sanitary measures. After these control measures were instituted , no additional cases occurred. Within six weeks, 11 of the 12 children who were followed stopped excreting Salmonella and were able to return to their usual classroom.

Person-to-person spread of Salmonella has been considered unlikely because of the high dose (10^6 organisms) required to infect volunteers (1). However, infection and illness have occurred after the ingestion of a much smaller dose (10^2-10^3 organisms) in several foodborne outbreaks, (2), and recently person-to-person spread of Salmonella after a foodborne outbreak has been reported among health university students (3). At the university and the DCC, inadequate handwashing and toilet facilities were considered to be major factors contributing to the spread of Salmonella. Pickering et al. (4) observed that DCCs often lack the resources for isolation rooms. Nonetheless, where feasible, a policy of dividing into cohorts culture-positive and symptom-free children may be more effective than excluding them in an effort to control enteric disease in DCCs. At least one advantage is the decreased potential for the seeding of other DCCs in the community by transferred, infected children.

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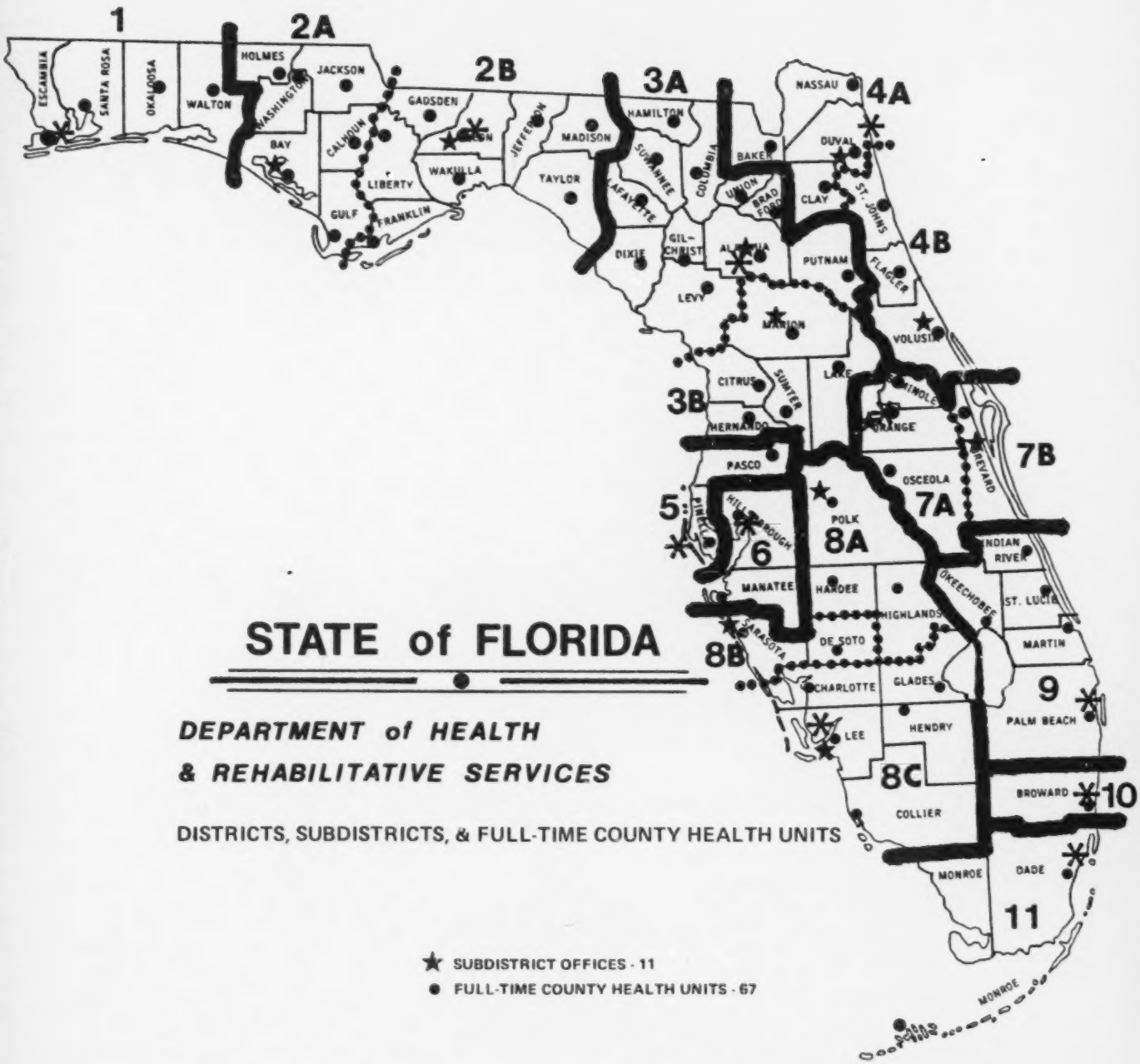


STATE of FLORIDA

DEPARTMENT of HEALTH
& REHABILITATIVE SERVICES

DISTRICTS, SUBDISTRICTS, & FULL-TIME COUNTY HEALTH UNITS

★ SUBDISTRICT OFFICES - 11

● FULL-TIME COUNTY HEALTH UNITS - 67

DISTRICT HEADQUARTERS ✱

ALPHABETICAL LIST OF FLORIDA COUNTIES WITH
1980 POPULATIONS AND DISTRICT NUMBERS

COUNTY	POPULATION	DISTRICT
Alachua	152,513	3A
Baker	15,440	4A
Bay	98,301	2A
Bradford	20,158	3A
Brevard	274,033	7B
Broward	1,023,892	10
Calhoun	9,336	2A
Charlotte	59,904	8C
Citrus	55,591	3B
Clay	67,927	4A
Collier	86,985	8C
Columbia	35,653	3A
Dade	1,634,934	11
DeSoto	19,188	8B
Dixie	7,808	3A
Duval	572,034	4A
Escambia	234,506	1
Flagler	11,074	4B
Franklin	7,676	2B
Gadsden	41,625	2B
Gilchrist	5,822	3A
Glades	6,050	8C
Gulf	10,672	2A
Hamilton	8,785	3A
Hardee	19,491	8A
Hendry	18,768	8C
Hernando	45,156	3B
Highlands	47,976	8A
Hillsborough	650,877	6
Holmes	14,823	2A
Indian River	60,494	9
Jackson	39,272	2A
Jefferson	10,751	2B
Lafayette	4,064	3A
Lake	105,759	3B
Lee	207,767	8C
Leon	149,795	2B
Levy	20,048	3A
Liberty	4,282	2B
Madison	14,929	2B
Manatee	149,725	6
Marion	123,824	3B
Martin	64,913	9
Monroe	63,361	11
Nassau	33,201	4A
Okaloosa	110,463	1
Okeechobee	20,490	9
Orange	474,844	7A
Osceola	49,888	7A
Palm Beach	578,728	9
Pasco	197,077	5
Pinellas	733,561	5
Polk	323,980	8A
Putnam	50,902	3A
St. Johns	51,810	4B
St. Lucie	88,091	9
Santa Rosa	56,444	1
Sarasota	204,297	8B
Seminole	182,154	7A
Sumter	24,508	3B
Suwannee	22,455	3A
Taylor	16,604	2B
Union	10,217	3A
Volusia	260,994	4B
Wakulla	11,001	2B
Walton	21,430	1
Washington	14,585	2A
STATE TOTAL*	9,813,706	

*State population increased 5.6 percent from 1979.

SECTION 1:

Summary of Selected Notifiable Diseases

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES BY MONTH OF ONSET, FLORIDA, 1980

DISEASES	TOTALS	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK
Encephalitis, Post-Infectious	21	0	2	4	2	2	4	1	0	1	1	1	1	2
Encephalitis (Other, excluding arthropod-borne)	59	5	3	2	5	3	3	7	8	4	5	7	7	0
Hepatitis A	2278	179	152	188	167	222	213	205	196	203	169	139	138	107
Hepatitis B	1222	102	99	84	80	95	94	77	96	95	99	83	82	136
Hepatitis Asso. w/Blood or Blood Products	51	3	3	7	4	4	6	2	3	5	4	2	2	6
Hepatitis, Unspecified	788	57	47	77	59	81	62	69	70	62	59	46	31	68
Influenza (Confirmed)	106	10	45	13	1	1	1	0	1	0	4	2	18	10
Legionnaires' Disease	12	0	2	1	3	0	1	1	0	0	2	1	0	1
Malaria	86	8	2	3	4	5	6	12	9	3	9	3	4	18
Measles	432	53	58	106	83	61	24	10	9	7	5	4	11	1
Meningitis, Aseptic	654	26	23	38	56	67	75	77	60	75	59	42	38	18
Meningitis, Meningococcal	218	23	19	23	15	13	15	21	12	14	13	19	22	9
Meningitis, Other Bacterial	487	54	50	43	36	43	37	18	22	35	42	33	57	17
Mumps	195	28	22	34	27	12	7	8	7	4	5	10	6	25
Pertussis	68	1	3	2	5	2	4	19	7	6	5	2	4	8
Reye Syndrome	21	3	7	5	1	0	0	1	0	2	0	0	1	1
Rubella (Excluding Congenital)	109	8	17	12	12	16	7	11	10	5	2	7	1	1
Salmonellosis	2031	84	71	71	116	118	172	217	252	274	199	198	105	154
Shigellosis	927	37	44	62	84	80	101	110	75	69	52	95	43	75
Typhoid Fever	16	3	1	1	1	2	0	5	2	0	0	1	0	0

REPORTED CASES OF SELECTED NOTIFIABLE DISEASES, FLORIDA, 1971-1980

DISEASES	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971
Chickenpox	8707	6643	4757	4953	4572	3607	4327	4941	3950	2594
Encephalitis, Post-Infectious	21	12	6	8	19	37	36	5	27	68
Encephalitis (Other, excluding arthropod-borne)	59	55	92	42	26	44	54	43	43	114
Hepatitis A **	2278	1883	1755	1375	2360	2967	4079	3524	2459	2191
Hepatitis B	1222	981	966	796	774	613	562	439	401	312
Hepatitis Asso. w/Blood or Blood Products	51	82	+	+	+	+	+	+	+	+
Hepatitis, Unspecified	788	741	583	400	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Gonorrhea	65437	61427	60377	58839	58921	65031	61507	52582	43688	30659
Influenza (Confirmed)	106	78	+	+	+	+	+	+	+	+
Legionnaires' Disease	12	47	+	+	+	+	+	+	+	+
Malaria	86	32	40	23	22	12	8	9	16	39
Measles (Rubeola)	432	938	1203	308	342	116	237	369	1460	2365
Meningitis, Aseptic	654	319	311	258	189	195	248	263	218	616
Meningitis, Meningococcal	218	203	232	131	90	91	95	55	81	133
Meningitis, Other Bacterial	487	424	+	+	+	+	+	+	+	+
Mumps	195	216	318	285	387	1231	2003	2682	1525	2995
Pertussis	68	51	62	75	18	25	30	40	72	89
Reye Syndrome	21	13	7	6	5	8	14	0	3	2
Rubella (Excluding Congenital)	109	318	214	197	53	153	205	1066	1913	1818
Salmonellosis	2031	1853	1624	1192	1252	1269	1182	1068	1466	1517
Shigellosis	927	808	857	498	315	488	730	664	863	538
Streptococcal Infections	24203	22903	15580	11951	8355	10731	13574	15630	10653	8370
Syphilis (All Stages)	4384	4567	4648	4543	5528	6328	5518	4339	3691	3651
Tuberculosis ++	1647	1628	1724	1531	1497	1639	1460	1487	1517	1515
Typhoid Fever	16	23	19	20	19	8	16	222	10	13

**Includes Hepatitis Unspecified 1971-1976
+Not Reported This Year
xxxxxIncluded In Hepatitis A

REPORTED CASE RATES PER 100,000 POPULATION FOR SELECTED NOTIFIABLE DISEASES, FLORIDA, 1971-1980

DISEASES	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971
Chickenpox	88.7	71.5	53.1	56.8	53.5	42.5	52.5	63.0	53.1	36.9
Encephalitis, Post-Infectious	0.2	0.1	0.1	0.1	0.2	0.4	0.4	0.1	0.4	1.0
Encephalitis (Other, excluding arthropod-borne)	0.6	0.6	1.0	0.5	0.3	0.5	0.7	0.5	0.6	1.6
Hepatitis A **	23.2	20.3	19.6	15.8	27.6	35.0	49.4	44.9	33.0	31.2
Hepatitis B	12.5	10.6	10.8	9.1	9.1	7.2	6.8	5.6	5.4	4.4
Hepatitis Assoc. w/Blood or Blood Products	0.5	0.9	+	+	+	+	+	+	+	+
Hepatitis, Unspecified	8.0	8.0	6.5	4.6	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx	xxxxx
Gonorrhea	666.8	660.9	673.4	675.0	689.0	766.4	745.6	670.3	587.1	436.5
Influenza (Confirmed)	1.1	0.8	+	+	+	+	+	+	+	+
Legionnaires' Disease	0.1	0.5	+	+	+	+	+	+	+	+
Malaria	0.9	0.3	0.4	0.3	0.3	0.1	0.1	0.1	0.2	0.6
Measles (Rubeola)	4.4	10.1	13.4	3.5	4.0	1.4	2.9	4.7	19.6	33.7
Meningitis, Aseptic	6.7	3.4	3.5	3.0	2.2	2.3	3.0	3.4	2.9	8.8
Meningitis, Meningococcal	2.2	2.2	2.6	1.5	1.1	1.1	1.2	0.7	1.1	1.9
Meningitis, Other Bacterial	5.0	4.6	+	+	+	+	+	+	+	+
Mumps	2.0	2.3	3.5	3.3	4.5	14.5	24.3	34.2	20.5	42.6
Pertussis	0.7	0.5	0.7	0.9	0.2	0.3	0.4	0.5	1.0	1.3
Reye Syndrome	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0	-	-
Rubella (Excluding Congenital)	1.1	3.4	2.4	2.3	0.6	1.8	2.5	13.6	25.7	25.9
Salmonellosis	20.7	19.9	18.1	13.7	14.6	15.0	14.3	13.6	19.7	21.6
Shigellosis	9.4	8.7	9.6	5.7	3.7	5.8	8.8	8.5	11.6	7.7
Streptococcal Infections	246.6	246.4	173.8	137.1	97.7	126.5	164.6	199.2	143.1	119.2
Syphilis (All Stages)	44.7	49.1	51.8	52.1	64.6	74.6	66.9	55.3	49.6	52.0
Tuberculosis ++	16.8	17.5	19.2	17.6	17.5	19.3	17.7	19.0	20.4	22.1
Typhoid Fever	0.2	0.2	0.2	0.2	0.2	0.1	0.2	2.8	0.1	0.2

**Includes Hepatitis Unspecified In Rates 1971-1976
+Not Reported This Year
++1980, 1979 and 1978 Includes New And Reactivated Cases

xxxxxIncluded In Hepatitis A
-Rate Less Than 0.05

REPORTED CASES OF NOTIFIABLE DISEASES OF INFREQUENT OCCURRENCE, FLORIDA, 1966-1980

DISEASE	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	Not Reported Prior To	Year Last Case Reported
Actinomycosis	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	1944	
Amebiasis	45	33	22	19	15	17	13	21	23	12	21	34	22	39	46		
Amebic Encephalitis	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	1965	
Anthrax	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0		
Aspergillosis	0	0	0	0	0	0	0	0	0	1						1971	
Blastomycosis	0	0	7	4	2	0	3	0	0	1	3	2	2	0	0	1965	
Botulism	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1961	
Bubonic Plague	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1920
Cat Scratch Fever	39	30	5	0	6	0	2	1	1	3	0	0	0	0	1	1962	
Chancroid	57	28	11	9	40	104	135	143	195	208	284	113	41	56	114		
Cholera (Group O 1)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1937
Coccidiomycosis	1	0	1	0	0	1	3	0	2	0	0	2				1969	
Congenital Rubella	2	4	1	0	1	0	1	1	0	1						1971	
Cryptococcosis	6	2	2	2	1	3	2	1	1	2	1	4	1	2	10	1962	
Cutaneous Myiasis	0	0	0	0	0	0	0	0	0	0	0	0	0	1		1967	
Dengue	1	0	7	3	0	0	0	1	0	0	0	2	0	0	0		
Diphtheria	0	0	0	0	0	0	0	7	5	5	14	22	16	7	8		
Diphyllobothrium latum	0	0	0	0	0	0	0	0	0	0	0	0	0	1		1967	
Dirofilaria immitis	0	0	0	0	0	0	0	0	0	0	1					1970	
Glanders	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1918
Granuloma Inguinale	0	0	1	3	1	3	3	5	10	18	24	11	34	31	36		
Histoplasmosis	1	4	1	3	1	1	1	25	0	3	1	0	2	2	4	1957	
Hansen's Disease (Leprosy)	4	9	2	3	5	9	7	4	1	7	4	12	11	5	13		
Ichthyosarcotoxin	0	0	0	0	0	0	0	0	3	0	0	0	5			1968	
Leptospirosis	11	18	22	8	1	13	8	3	8	10	10	14	18	8	9	1950	

REPORTED CASES OF NOTIFIABLE DISEASES OF INFREQUENT OCCURRENCE, FLORIDA, 1966-1980, CONT.

DISEASE	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	Not Reported Prior To	Year Last Case Reported
Listeriosis	1	0	9	6	3	1	3	2	0	0	3	6	1	0	0	1965	
Lymphocytic Choriomeningitis	0	0	0	0	0	0	0	0	0	0	0	0	1			1968	
Madura Foot	0	0	0	0	0	0	0	1	0	0	0	1				1969	
Ophthalmia Neonatorum	3	9	8	12	11	6	18	9	7	13	***	8	7	0	4		
Polio	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1		
Psittacosis	5	0	3	4	3	1	4	1	0	0	0	2	0	1	0	1954	
Rabies (Human)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1948
Relapsing Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1918
Rocky Mt. Spotted Fever	9	10	12	2	4	6	2	3	1	2	1	1	3	0	1	1947	
Salmonella Meningitis	0	0	0	0	0	0	2	0	0	1	1	0	0	0	1	1966	
Schistosomiasis	3	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1965	
Smallpox	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1946
Sporotrichosis	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1	1957	
Strongyloidiasis	0	0	1	4	7	1	3	3	1							1972	
Taenia saginata	0	0	0	0	0	0	0	0	1	1						1971	
Tetanus	4	8	10	14	9	5	10	10	10	13	16	12	11				
Tick Paralysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1963	1963
Toxoplasmosis	32	6	2	1	0	0	2	0	0	1	0	2	0	0	0	1964	
Trachoma	0	0	0	0	0	0	0	0	0	0	0	0	0	1		1967	
Trichinosis	0	0	1	0	1	1	0	1	0	5	0	1	0	0	0	1951	
Trypanosomiasis	0	0	0	0	0	0	0	0	0	0	0	0	1			1968	
Tularemia	0	0	2	0	1	2	0	2	1	2	2	3	1	1	0		
Typhus Fever (Murine)	0	1	1	0	0	1	0	0	0	0	1	0	3	2	0	1946	
Vaccinia	0	0	0	0	0	0	0	0	1	2	1					1970	
Yellow Fever	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		1918

***Included in Gonorrhea

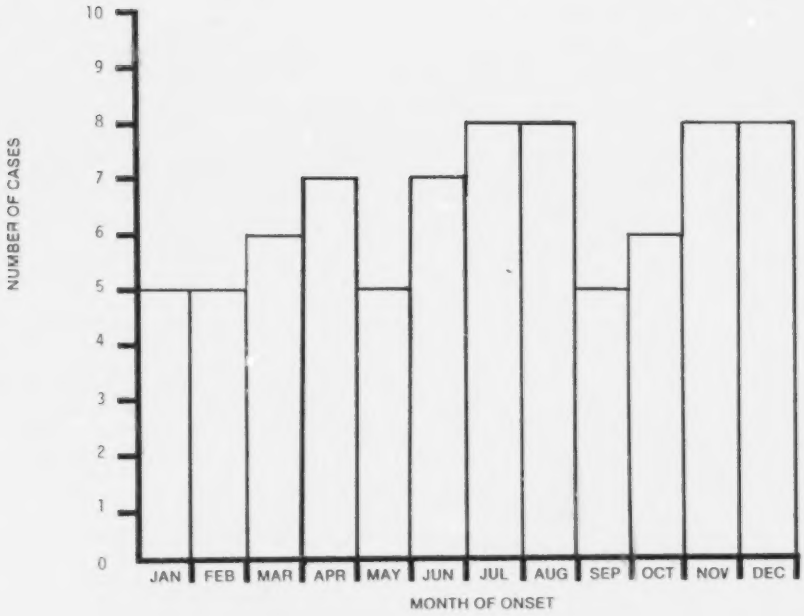
SECTION 2:

Analysis of Selected Notifiable Diseases

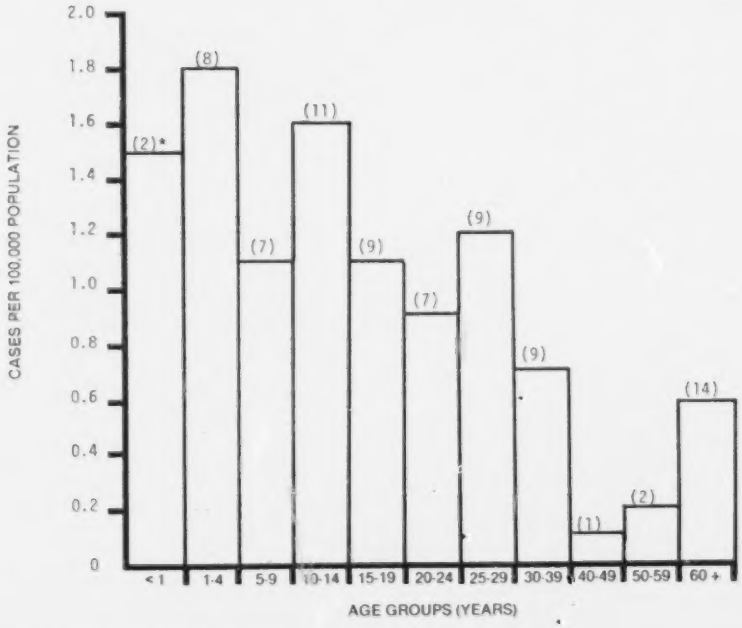
ENCEPHALITIS, POST-INFECTIOUS AND OTHER (INCLUDING UNSPECIFIED AND EXCLUDING ARTHROPOD-BORNE) - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE
Alachua			1		1	1								3	2.0
Baker															0.0
Bay															0.0
Bradford															0.0
Brevard			1				1							2	0.7
Broward				1				1	1	1				4	0.4
Calhoun															0.0
Charlotte															0.0
Citrus															0.0
Clay															0.0
Collier				2										2	2.3
Columbia															0.0
Dade															0.0
DeSoto															0.0
Dixie															0.0
Duval	2					1	3	1		1	2			10	1.7
Escambia															0.0
Flagler															0.0
Franklin															0.0
Gadsden															0.0
Gilchrist															0.0
Glades															0.0
Gulf															0.0
Hamilton															0.0
Hardee															0.0
Hendry															0.0
Hernando				1									1	2	4.4
Highlands															0.0
Hillsborough			1	2		1	1			1	1	2		9	1.4
Holmes															0.0
Indian River															0.0
Jackson															0.0
Jefferson															0.0
Lafayette															0.0
Lake		1										1		2	1.9
Lee	1				1			1			1	2		6	2.9
Leon			1											1	0.7
Levy															0.0
Liberty															0.0
Madison															0.0
Manatee															0.0
Marion															0.0
Martin												1		1	1.5
Monroe															0.0
Nassau															0.0
Okaloosa															0.0
Okeechobee															0.0
Orange			1			2	2	1	1	1	1			9	1.9
Osceola															0.0
Palm Beach	1	1		1	1					1	2			7	1.2
Pasco															0.0
Pinellas	1	1			1	1		1				1	1	7	1.0
Polk		2			1	1	1	3	2					10	3.1
Putnam															0.0
St. Johns															0.0
St. Lucie										1				1	1.1
Santa Rosa															0.0
Sarasota									1					1	0.5
Seminole			1								1	1		3	1.6
Sumter															0.0
Suwanee															0.0
Taylor															0.0
Union															0.0
Volusia															0.0
Wakulla															0.0
Walton															0.0
Washington															0.0
STATE TOTAL	5	5	6	7	5	7	8	8	5	6	8	8	2	80	0.8

ENCEPHALITIS, POST-INFECTIOUS AND OTHER (INCLUDING UNSPECIFIED AND EXCLUDING ARTHROPOD-BORNE)- REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



ENCEPHALITIS, POST-INFECTIOUS AND OTHER (INCLUDING UNSPECIFIED AND EXCLUDING ARTHROPOD-BORNE) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



*( ) Reported number of cases

HEPATITIS A

In 1980, 2,278 cases of hepatitis A were reported to the Florida Uniform Statewide Communicable Disease Surveillance and Reporting System. This represented a 21.0% increase over the total number of cases reported in 1979 (1,883); however, when adjusted for population increases, the rate per 100,000 population was 23.2 or a 14.3% increase over the rate in 1979 (20.3 per 100,000) and a 24.7% increase over the mean rate for the period 1977-79 (18.6 per 100,000). From 1970-1979, case rates increased to a high of 49.4 per 100,000 in 1974 and then decreased to a low of 15.8 per 100,000 in 1977 while, at the same time, national and regional data showed a gradual but steady rise. The variation in rates within the State are attributable in part to the classification of hepatitis unspecified with hepatitis A from 1970 to 1976 and also to general changes in the reporting system.

Reported cases of hepatitis A generally showed little variation by month of onset in 1980. Young adults age 20-29 had the highest reported rates of illness (56.4 per 100,000). As expected, low rates were reported for children less than 5 years of age who when infected frequently have subclinical infection or non-specific mild illness and are, therefore, probably underdiagnosed.

Of the 2,278 cases reported, 1,390 (61.0%) were reported by seven metropolitan counties, each having a population in excess of 250,000 (Broward, Dade, Hillsborough, Orange, Palm Beach, Pinellas, and Volusia) and whose combined population equals 54.6% of the State's total population.

Within all age groups from 10-49 years, the total number of reported cases and case rates were greater for males than for females, a trend also observed in the national data. The observed difference was greatest in the 25-29 year age group and it is unclear whether this observation is due to differences in disease presentation, infection rates, or exposure.

Of the 2,278 cases reported to the State, a CDC Viral Hepatitis Case Record Form was completed on 1,957 (85.9%) and entered into the data system of the CDC National Hepatitis Surveillance Program.

Of 1,539 case reports analyzable for the question of prior personal contact with a known jaundice person or with a case of hepatitis, 475 (30.9%) indicated that such contact or exposure had occurred. Of 1,743 analyzable responses, 352 (20.2%) indicated an association with a nursery or day care center program. Of 1,710 analyzable responses, 214 (12.5%) indicated a consumption of raw shellfish, a percentage almost equal to that for hepatitis B (15.0%).

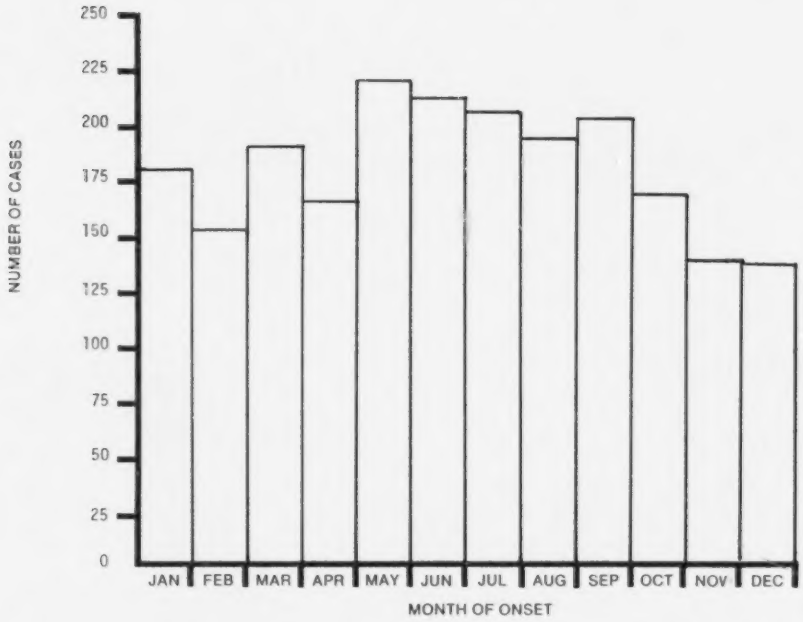
The largest outbreak of hepatitis A in 1980 occurred in Volusia County among a group of day care centers which accounted for 150 (39.8%) of the county's total 377 reported cases. The outbreak began in July of 1979 and lasted until October of 1980, ultimately involving 20 day care centers although 9 centers (10% of all those licensed in Volusia County) accounted for the majority of the cases. Although the county health unit issued prompt recommendations for immune serum globulin (IG) prophylaxis, it was determined that poor voluntary compliance (less than 20%) on the part of the parents and day care center staffs in obtaining IG led to undue prolongation of the outbreak. This observation was in contrast to one center where IG was administered on-site free of charge and where compliance was 100% (70/70 children and 19/19 employees). County health units are urged to give strong consideration to this latter approach once a day care center transmission is suspected.

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

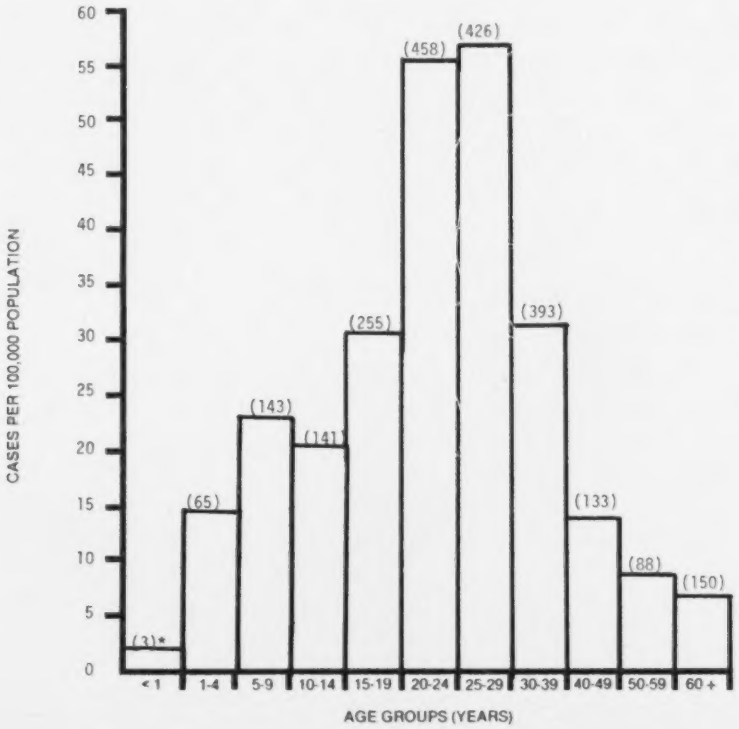
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. * MEAN
Alachua	1	6		4	11	1	1	1	2	2	2	1		32	21.0	11.7
Baker						1								1	6.5	10.2
Bay	4					1		1					3	9	9.2	7.9
Bradford				1				1						2	9.9	1.9
Brevard			3			1	1	1	1	1	2	1	2	13	4.7	10.8
Broward	23	12	18	14	27	26	24	13	11	8	11	19	25	231	22.6	14.3
Calhoun													1	1	10.7	0.0
Charlotte				1									1	2	3.3	10.6
Citrus		1			1			1				2		5	9.0	7.4
Clay	1					1			2	1	1			6	8.8	12.3
Collier	1	6	1		2		1	1	2	1	2	1		18	20.7	109.0
Columbia															0.0	15.4
Dade	10	11	12	7	22	17	14	11	20	15	18	15	6	178	10.9	13.0
DeSoto	1		2		1		1	6	2		3		1	17	88.6	10.8
Dixie															0.0	27.2
Duval	5	2	1	2	5	5	4	4	4	2	3	1	2	40	7.0	11.9
Escambia		2		1	2			1		3	4	1		14	6.0	13.4
Flagler			1										1	2	18.1	7.8
Franklin									1					1	13.0	0.0
Gadsden		1												1	2.4	2.7
Gilchrist					1								1	2	34.4	11.3
Glades															0.0	23.6
Gulf															0.0	12.0
Hamilton		1												1	11.4	0.0
Hardee								1						1	5.1	20.5
Hendry															0.0	13.8
Hernando															0.0	6.6
Highlands						1	2	2		2	1			8	16.7	39.3
Hillsborough	7	11	7	9	17	21	9	13	18	7	13	9	1	142	21.8	20.9
Holmes															0.0	9.5
Indian River					1								1	2	3.3	15.7
Jackson			3	1		1		1		1				7	17.8	17.3
Jefferson										1				1	9.3	3.3
Lafayette															0.0	31.7
Lake	3	1	2		1	1	1		1			2		12	11.3	18.4
Lee	1		3	2	3		7	4	2		1	1	10	34	16.4	29.5
Leon		4	1	2	1	3	4	1	1		2	1		20	13.4	19.8
Levy															0.0	0.0
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee	8	4	4	5	3	3	5	4	5	3	4	3	3	54	36.1	33.3
Marion						1		2	1	1			4	9	7.3	9.6
Martin	1		2	7	3	5	2		5	1	2			28	43.1	11.7
Monroe	3	4	8	2	5	5	14	6	2		1	4		54	85.2	39.4
Nassau			3	1	1	2					1			8	24.1	7.4
Okaloosa					2									2	1.8	1.8
Okeechobee	2	1		3		2				1	1	2		12	58.6	51.0
Orange	15	11	23	17	32	17	27	17	14	10	10	13	3	209	44.0	40.1
Osceola				2	1	1			2	1				7	14.0	19.3
Palm Beach	9	17	24	18	20	22	23	19	24	17	12	23		228	39.4	18.9
Pasco	5	1		3						1	2	6		18	9.1	14.7
Pinellas	12	6	6	7	8	2	1	6	5	6	2	1	3	65	8.9	16.2
Polk	9	11	20	15	10	10	4	15	19	13	2	4	25	157	48.5	27.4
Putnam											1			1	2.0	8.1
St. Johns	1	1			1		1	2	3					9	17.4	19.5
St. Lucie	1	1	3	3	3	1	2	2			1	1		18	20.4	16.2
Santa Rosa			1	1				2			1	1		6	10.6	4.0
Sarasota	1	3	5	3	9	20	3				2	1		47	23.0	19.7
Seminole	7	11	9	11	6	13	25	22	19	10	9	5	2	149	81.8	32.8
Sumter								1	2	1				4	16.3	15.3
Suwanee															0.0	11.3
Taylor	1		1	1		1	1							5	30.1	6.7
Union	1						1	1		2	1			6	58.7	47.3
Volusia	46	22	24	24	23	28	27	34	35	58	24	20	12	377	144.4	37.5
Wakulla		1												1	9.1	156.5
Walton															0.0	3.5
Washington				1										1	6.9	4.4
STATE TOTAL	179	152	188	167	222	213	205	196	203	169	139	138	107	2278	23.2	18.7

* 1977-1979 Average rate

HEPATITIS A - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



HEPATITIS A - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

HEPATITIS B

In 1980, 1,222 cases of hepatitis B were reported to the State, representing an increase of 24.6% over 1979 (981 cases) and a 33.7% increase over the previous three-year mean (914 cases). The annual incidence in 1980 was 12.5 cases per 100,000 population compared to 10.6 for 1979. Little variation by season was observed. The seven largest counties which reported the majority of cases of hepatitis A in 1980 also reported the majority of cases of hepatitis B (755 cases or 61.8% of the State's total). These counties included:Broward, Dade, Hillsborough, Orange, Palm Beach, Pinellas, and Volusia and, collectively, they represent 54.6% of the State's total population.

The age group with the highest attack rate (40.3 per 100,000) was the 20-24 year olds which is similar to previous years, and within this age group, 61.8% were males. These findings are consistent with the national data.

Within the age groups of 15-39 years, the observed differences in rates for hepatitis B by age and sex may be attributable in part to differences in life styles, particularly given the well-documented risk factors of exposure to sexual contact (especially if numerous and even more so if homosexual), drug abuse, etc.

Of the 1,222 cases reported, the CDC Viral Hepatitis Case Report Form was completed and submitted on 1,006 (82.3%) and entered into the National Hepatitis Surveillance Program. Analysis of these data showed that personal contact with a known case was the most commonly reported epidemiologic characteristic -- 142 (20.1%) of 706 analyzable responses. Other exposures reported frequently were: dental procedures (125 out of 754 analyzable responses or 16.6%); shellfish consumption (114 out of 758 responses or 15.0%); surgery (92 out of 781 responses or 11.8%); transfusions (70 of 822 responses or 8.5%), and drug abuse (62 of 791 responses or 7.8%).

The data also showed that of 1,006 reported cases of hepatitis B, 854 (84.9%) were tested for hepatitis B surface antigen (HBsAg) and, of these, 796 (93.2%) were HBsAg positive. Among 1,957 reported cases of hepatitis A in 1980, HBsAg testing was performed on 1,263 (64.5%) of which only 51 (4.0%) were positive. Among those patients tested for HBsAg in 1980, therefore, the probability of a correct diagnosis of hepatitis B was 94% while that for an incorrect diagnosis was 5%. In 1979, the corresponding figures for the correct and incorrect diagnosis for hepatitis B were 88% and 4% respectively. These statistics compare favorably with recent national data.

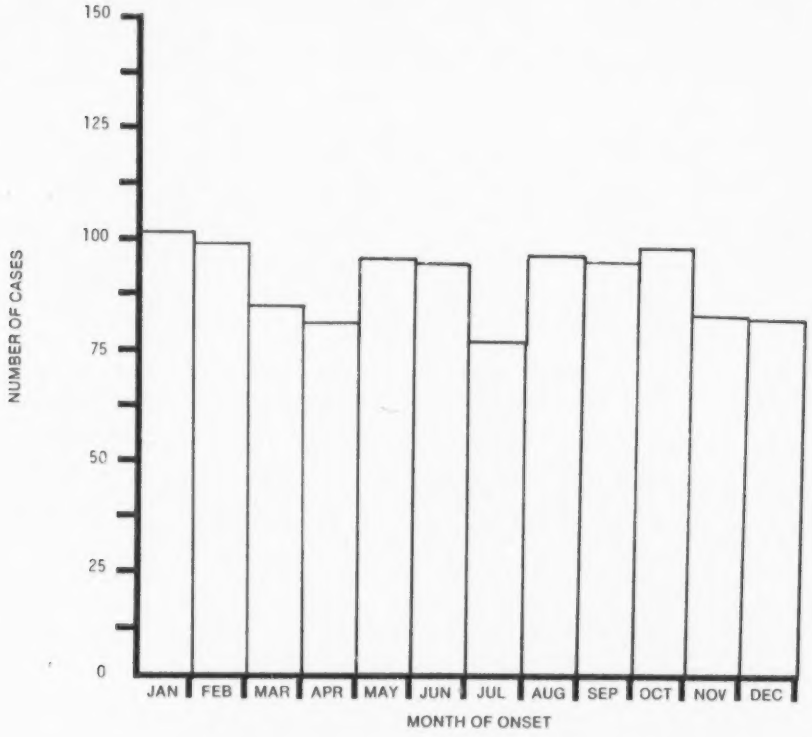
The only outbreak of hepatitis B reported during 1980 involved 6 patients who visited an acupuncture clinic in Orange County. The source of the outbreak was probably an asymptomatically infected patient who contaminated acupuncture needles which were reused after inadequate decontamination (soaking in benzalkonium chloride solution). No further cases were reported after the clinic switched to disposable needles.

HEPATITIS B - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

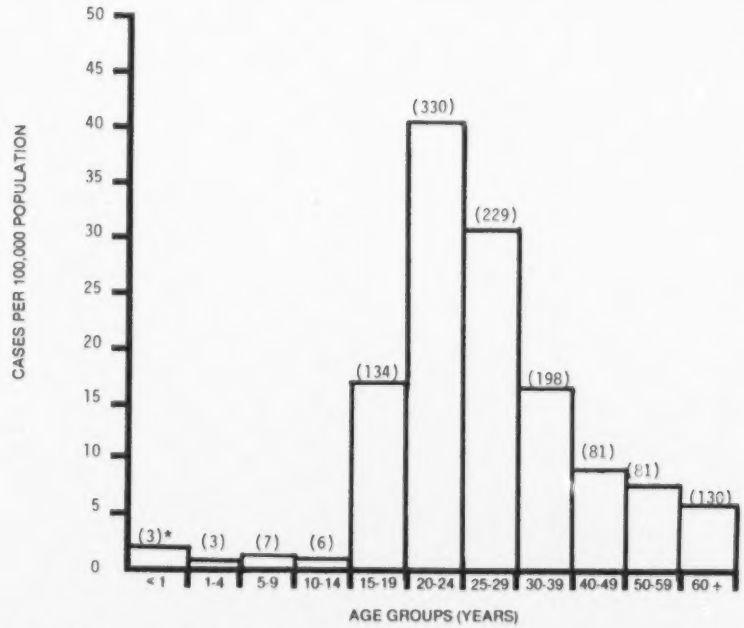
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua		1	2		2	2	1		1	1	1	3		14	9.2	15.2
Baker															0.0	2.5
Bay	1										1	1	1	4	4.1	3.1
Bradford	1			1							1			3	14.9	3.9
Brevard	7	2	3	2	2	4	4	5	5	4		8	3	49	17.9	4.0
Broward	15	19	13	18	11	13	8	9	20	12	8	9	37	192	18.8	12.1
Calhoun					1									1	10.7	7.5
Charlotte	2	1	2		1			1			1		2	10	16.7	6.0
Citrus		1								1				2	3.6	3.3
Clay		1	1							2				4	5.9	4.9
Collier		5	4			1	1	1				2		14	16.1	8.0
Columbia											1			1	2.8	4.4
Dade	11	11	11	14	14	10	7	5	9	15	10	7	25	149	9.1	14.3
DeSoto	1									1		1		3	15.6	7.2
Dixie											1			1	12.8	0.0
Duval	2	4	3	6	4	8	5	7	10	2	8	5	4	68	11.9	5.7
Escambia	4	2				1		1			1	1		10	4.3	2.4
Flagler													1	1	9.0	0.0
Franklin											1			1	13.0	0.0
Gadsden												2		2	4.8	10.7
Gilchrist													1	1	17.2	0.0
Glades															0.0	0.0
Gulf															0.0	0.0
Hamilton															0.0	0.0
Hardee															0.0	0.0
Hendry															0.0	3.9
Hernando	2									2			1	5	11.1	0.9
Highlands															0.0	1.5
Hillsborough	3	6	5	2	8	6	2	8	7	7	1	5	2	62	9.5	9.8
Holmes															0.0	0.0
Indian River				1										1	1.7	3.8
Jackson						2			1	1	1			5	12.7	0.9
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake	2	2	1	2				1		1	1	1		11	10.4	2.5
Lee	2		2		2					1	1	3	10	21	10.1	9.7
Leon		2	4	3	1	2	3		1	1		6		23	15.4	6.9
Levy															0.0	0.0
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee										1		1	10	12	8.0	5.9
Marion					1			1					3	5	4.0	1.9
Martin		1	1	2		1							1	6	9.2	4.3
Monroe	1	2	1	1	2	1		1	2	2				13	20.5	23.9
Nassau															0.0	1.1
Okaloosa							2	1						3	2.7	2.7
Okeechobee															0.0	17.6
Orange	8	11	8	7	16	12	9	12	8	15	12	8	4	130	27.4	16.9
Osceola					1	1	1		2	1				6	12.0	4.2
Palm Beach	6	5	5	2	4	7	7	12	5	10	6	3	3	75	13.0	10.5
Pasco	4	2		1	4	3	1	1	1	3	1			21	10.7	6.8
Pinellas	6	6	10	4	4	7	8	2	8	5	8	4	6	78	10.6	17.5
Polk	2	3	3	1	2	1	1	5	3	2	3	2	3	31	9.6	5.2
Putnam						1		1						2	3.9	6.6
St. Johns								1			2		2	5	9.7	16.5
St. Lucie	1			2	1	2	1	2		1				10	11.4	3.4
Santa Rosa					2		2	1						5	8.9	4.0
Sarasota	2	3	2	6	3	1	2	11	5		3	2		40	19.6	5.3
Seminole	4	2	1	1			7	2	4	4	2	5	2	34	18.7	3.8
Sumter	1			1										2	8.2	3.1
Suwanee															0.0	6.5
Taylor															0.0	2.2
Union	2		1		1	2	1	1	1		2			11	107.7	47.3
Volusia	11	7		2	8	6	3	4	2	4	5	3	15	70	26.8	15.4
Wakulla			1	1			1				1			4	36.4	3.6
Walton															0.0	5.2
Washington	1													1	6.9	0.0
STATE TOTAL	102	99	84	80	95	94	77	96	95	99	83	82	136	1222	12.5	10.0

*1977-1979 Average rate

HEPATITIS B - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



HEPATITIS B - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

HEPATITIS ASSOCIATED WITH BLOOD/BLOOD PRODUCTS

The diagnosis of hepatitis associated with blood/blood products was first established as a reporting category in 1979. In 1980, there were a total of 51 cases reported to the State under this category.

There have been some inconsistencies in the reporting of hepatitis associated with blood products that make interpretation difficult. Hospital surveillance of persons receiving transfusions may be a better way to evaluate the magnitude of post-transfusion hepatitis. In 1981, the category of hepatitis associated with blood products will be re-classified as non-A/non-B hepatitis associated with blood/blood products. Cases of hepatitis B with a history of transfusion will be reported under the general category of hepatitis B.

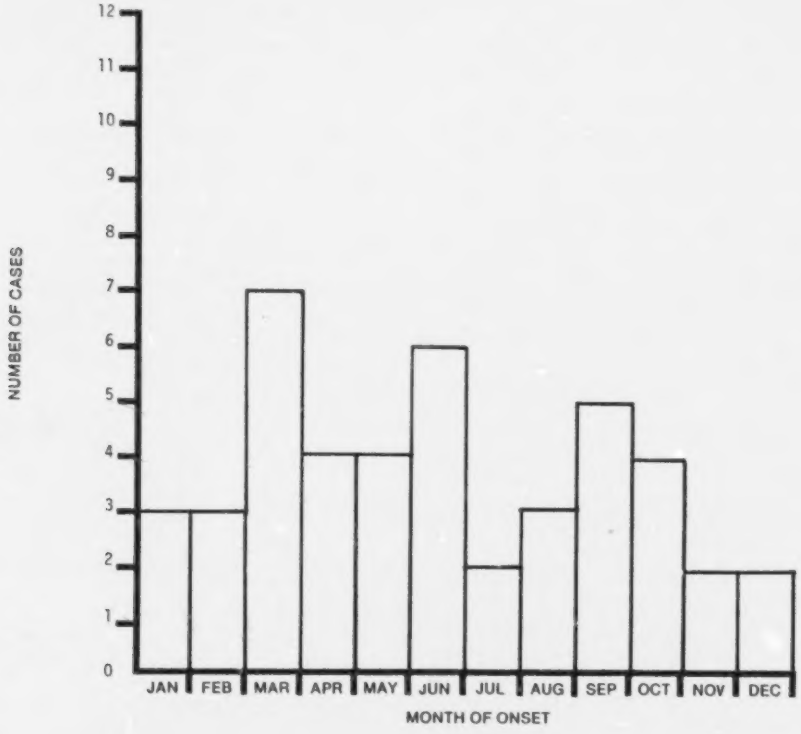
Recent advances in diagnostic procedures in the viral hepatitides have resulted in the recognition of an additional type of non-A/non-B hepatitis which is not associated with blood products. Beginning with the 1981 edition of Florida Morbidity Statistics, these cases will be reported as a separate category.

HEPATITIS ASSOCIATED WITH BLOOD/BLOOD PRODUCTS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

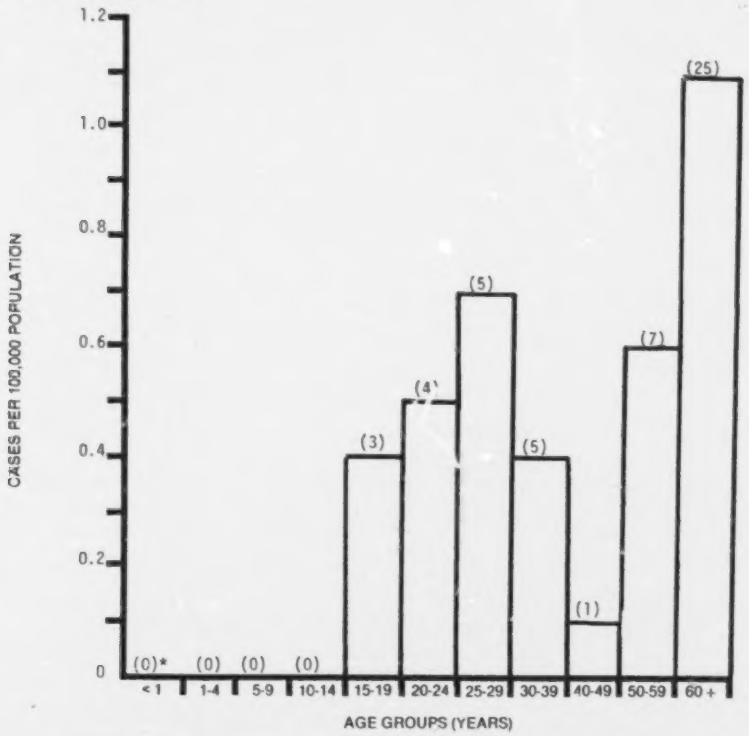
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN*
Alachua															0.0	--
Baker															0.0	--
Bay															0.0	--
Bradford															0.0	--
Brevard															0.0	--
Broward			1	1	1	1	1	1	2	1			1	10	1.0	--
Calhoun															0.0	--
Charlotte															0.0	--
Citrus															0.0	--
Clay															0.0	--
Collier															0.0	--
Columbia													1	1	2.8	--
Dade	1	1		1		1	1			2			4	11	0.7	--
DeSoto															0.0	--
Dixie															0.0	--
Duval								1				1		2	0.3	--
Escambia															0.0	--
Flagler															0.0	--
Franklin									1					1	13.0	--
Gadsden															0.0	--
Gilchrist															0.0	--
Glades															0.0	--
Gulf															0.0	--
Hamilton															0.0	--
Hardee															0.0	--
Hendry															0.0	--
Hernando															0.0	--
Highlands															0.0	--
Hillsborough									1					1	0.2	--
Holmes															0.0	--
Indian River															0.0	--
Jackson															0.0	--
Jefferson															0.0	--
Lafayette															0.0	--
Lake															0.0	--
Lee															0.0	--
Leon															0.0	--
Levy															0.0	--
Liberty															0.0	--
Madison															0.0	--
Manatee															0.0	--
Marion															0.0	--
Martin				1										1	1.5	--
Monroe	1		1											2	3.2	--
Nassau															0.0	--
Okaloosa															0.0	--
Okeechobee															0.0	--
Orange	1		1	1		2			1	1	2			9	1.9	--
Osceola															0.0	--
Palm Beach			2			1						1		4	0.7	--
Pasco															0.0	--
Pinellas		1	2		2									5	0.7	--
Polk															0.0	--
Putnam															0.0	--
St. Johns															0.0	--
St. Lucie															0.0	--
Santa Rosa		1						1						2	3.5	--
Sarasota															0.0	--
Seminole															0.0	--
Sumter															0.0	--
Suwanee															0.0	--
Taylor															0.0	--
Union															0.0	--
Volusia					1	1								2	0.8	--
Wakulla															0.0	--
Walton															0.0	--
Washington															0.0	--
STATE TOTAL	3	3	7	4	4	6	2	3	5	4	2	2	6	51	0.5	--

* Not reported as a separate type of hepatitis in 1977 and 1978.

HEPATITIS ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



HEPATITIS ASSOCIATED WITH BLOOD OR BLOOD PRODUCTS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

HEPATITIS UNSPECIFIED

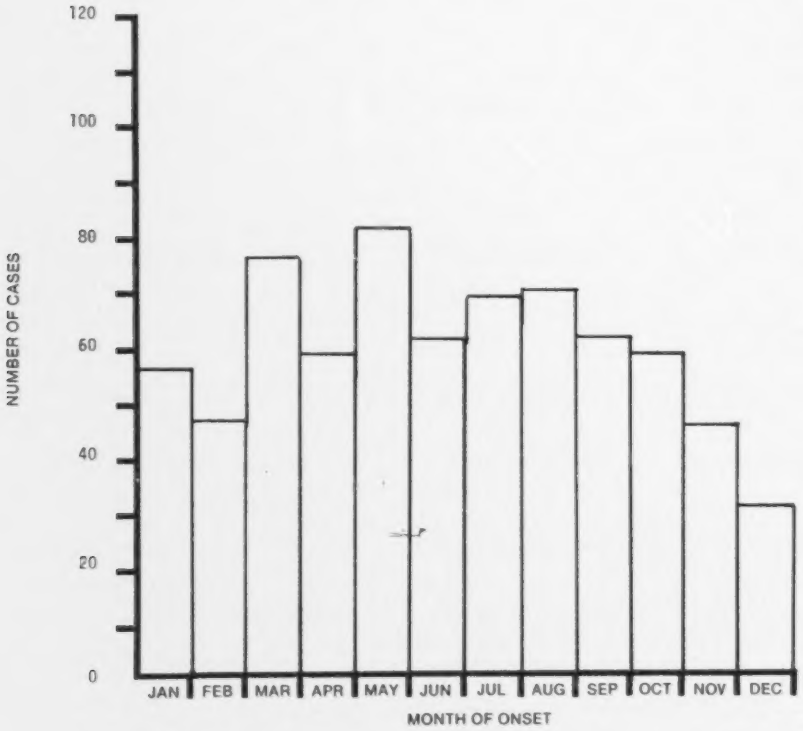
Hepatitis cases reported without a specific diagnosis were classified as a separate category beginning in 1978. In 1980, 788 cases were reported -- an increase of 6.3% over 1979 (741 cases). There was no change, however, in the rate per 100,000 population (8.0 in 1979 and 1980). The similarity of age distribution between hepatitis A and hepatitis unspecified suggests that had a diagnosis been established, many of the unspecified cases would have been shown to be cases of hepatitis A. In further support of this observation, 43.9% of the reported cases of hepatitis unspecified for which a case report form was submitted were tested for hepatitis B surface antigen (HBsAg) and of these only 64 (16.7%) were positive. As diagnostic testing becomes more readily available for hepatitis A, the hepatitis unspecified category should begin to decline in number.

HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

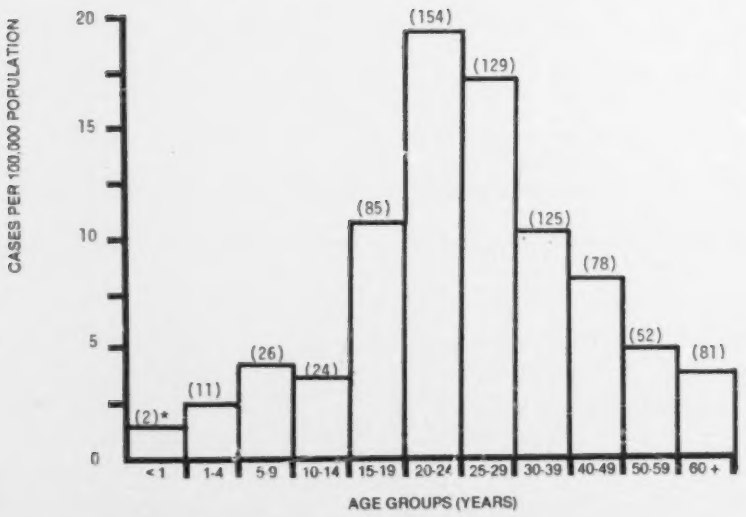
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN *
Alachua		1				1			2	1	2			7	4.6	9.5
Baker	1													1	6.5	2.5
Bay	1	1			3									5	5.1	3.1
Bradford			1											1	5.0	5.8
Brevard		1		1				2	1	1	1			7	2.6	1.8
Broward	1		6	3	9	3	5	8	5	4	4	3	18	69	6.7	4.5
Calhoun															0.0	3.8
Charlotte						1							1	2	3.3	3.3
Citrus	1	1		1	2			2	1					8	14.4	2.5
Clay								1						1	1.5	7.4
Collier			1	2	3			2				1		9	10.3	21.7
Columbia			1	1										2	5.6	1.1
Dade	12	11	8	14	25	17	14	15	10	9	12	2	14	163	10.0	3.0
DeSoto										1				1	5.2	1.8
Dixie															0.0	13.6
Duval	4	1	2	2	3		1	1		5			1	20	3.5	3.4
Escambia															0.0	0.1
Flagler															0.0	3.9
Franklin															0.0	0.0
Gadsden															0.0	0.9
Gilchrist															0.0	5.7
Glades															0.0	0.0
Gulf															0.0	0.0
Hamilton									1					1	11.4	3.8
Hardee															0.0	16.8
Hendry															0.0	3.9
Hernando															0.0	0.0
Highlands															0.0	1.5
Hillsborough	8	2	8	4	5	4	14	4		2	1	3	3	58	8.9	4.3
Holmes															0.0	0.0
Indian River	3	1			1	2			1				3	11	18.2	3.8
Jackson	1											1	1	3	7.6	5.2
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake	1			3		1	2		2			2		11	10.4	6.0
Lee	2		2				3	3	4	2	1		7	24	11.6	7.3
Leon		2	2	1	1		3	2	2	4		1		18	12.0	12.5
Levy						1				1				2	10.0	0.0
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee												1		1	0.7	2.9
Marion							1	3					7	11	8.9	1.3
Martin			2			1								3	4.6	1.2
Monroe	4	4	3	5	3	2								21	33.1	28.0
Nassau					2	1								3	9.0	3.2
Okaloosa				1		3		1		2		1		8	7.2	1.2
Okeechobee															0.0	0.0
Orange	5	6	15	5	10	7	5	6	8	4	5	4		80	16.8	15.5
Osceola										1				1	2.0	0.0
Palm Beach	5	3	6	6	3	2	1	2	8	8	1			45	7.8	1.5
Pasco							1	1	1	1				4	2.0	6.4
Pinellas			5	1		1	2		2	1	2	4	1	19	2.6	0.7
Polk	5	8	11	7	6	10	5	7	3	4	2	2	8	78	24.1	17.7
Putnam															0.0	2.2
St. Johns															0.0	1.5
St. Lucie						2			2		1			5	5.7	3.8
Santa Rosa															0.0	0.7
Sarasota		2							1	1		1		5	2.4	3.1
Seminole	2	1	1	2	4	2	7	6	5	3	9	3	2	47	25.8	8.2
Sumter															0.0	6.1
Suwanee			1				1							2	8.9	0.0
Taylor	1	1												2	12.0	62.5
Union		1								1				2	19.6	22.1
Volusia			2		1	1	4	4	2	3	5	2	2	26	10.0	6.4
Wakulla									1					1	9.1	0.0
Walton															0.0	1.7
Washington															0.0	0.0
STATE TOTAL	57	47	77	59	81	62	69	70	62	59	46	31	68	788	8.0	4.9

*1977-1979 Average rate

HEPATITIS UNSPECIFIED - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980

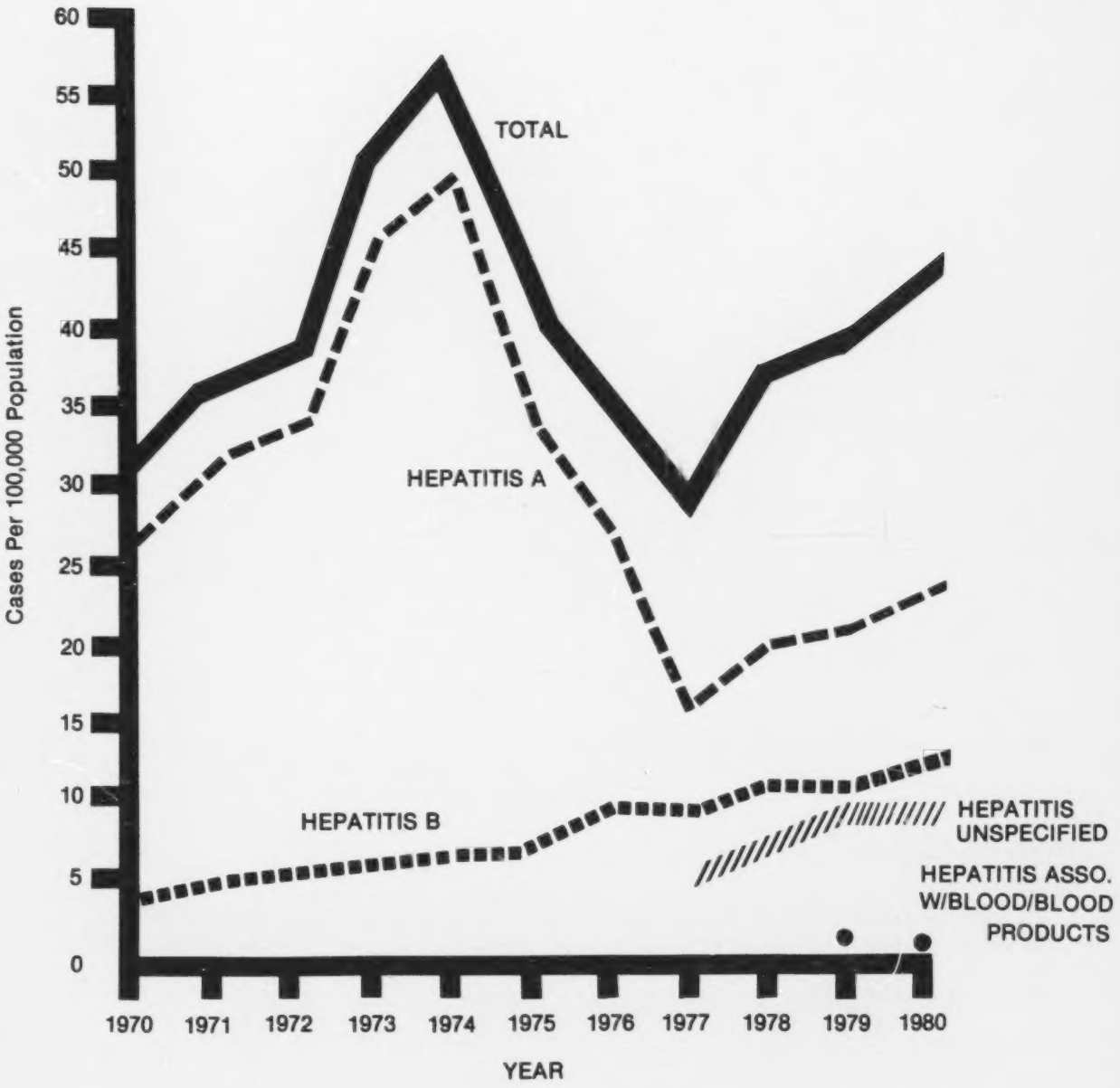


HEPATITIS UNSPECIFIED - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

HEPATITIS - Reported case rates by year, Florida,1970-1980



MEASLES

In 1980, there were 432 cases of measles reported in Florida, a 54% decrease from 1979 when 938 cases were reported. The 432 cases reported in 1980 represent a 47% decrease from the 3-year 1977-79 mean of 816 cases per year. The decrease in the number of cases reported in 1980 has reversed the slight upturn seen in 1978 and 1979 and measles morbidity continues to decline in Florida. The overall state case rate per 100,000 population was 4.4 which is a 56% decrease from 1979 (10.1) and a 52% decrease from the 3-year 1977-79 mean (9.1). The national case rate in 1980 was 6.0.

Measles cases were reported from 38 (57%) of Florida's 67 counties. Significant case activity occurred in the Tampa Bay area, Volusia County, Leon County, and to a lesser degree in southeast and east central Florida. Hillsborough (54 cases), Pinellas (54 cases), and Pasco (38 cases) counties accounted for 34% of the state's cases and had a combined case rate of 9.2 per 100,000 population compared to the overall state rate of 4.4. Volusia County reported 77 cases (school-based outbreak) and had the highest case rate in the state (29.5). Significant numbers of cases were also reported from Leon (41 cases, 27.4 rate), Brevard (30 cases, 10.9 rate), and Dade (40 cases, 2.4 rate) counties.

As usual, measles cases occurred in the late winter with a peak of 106 cases in March. Eighty-nine percent (385 cases) occurred during the first six months of the year. In 1980, the highest age group specific incidence rate per 100,000 population was, as in 1979, in the 1-4 year old age group (106 cases, 24.0 rate). The 5-9 year old age group (102 cases, 16.4 rate) and the 10-14 year old age group (100 cases, 14.6 rate) also contributed a significant number of cases. These data show that preschool and school age children still provide enough susceptibles to sustain measles virus transmission. Efforts at immunizing infants and children enrolled in day care centers remain a top priority of the state's immunization program.

Cases by race show that in the 1-4 year old age group 29% (30 of 104 cases) of the cases occurred in blacks, whereas blacks represent only 13% of the state's population. These data are an improvement over 1979 when almost 50% of the cases in the 1-4 year old age group were in black children. Increased efforts are needed to deliver immunization service to infants and young children in minority groups and not wait until school entry to begin immunizations.

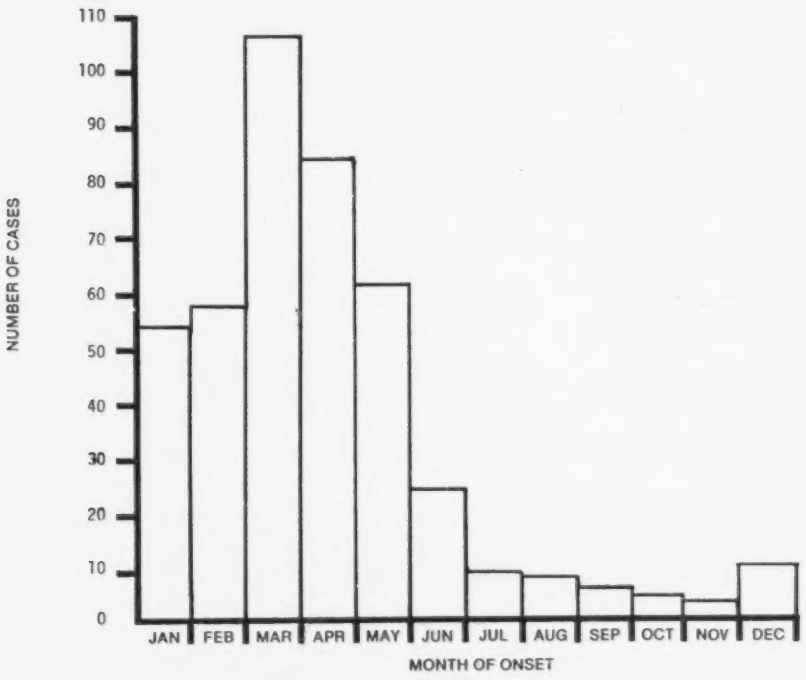
An outbreak of measles occurred in a middle school in Volusia County in March of 1980 (see Epi-Notes).

MEASLES - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

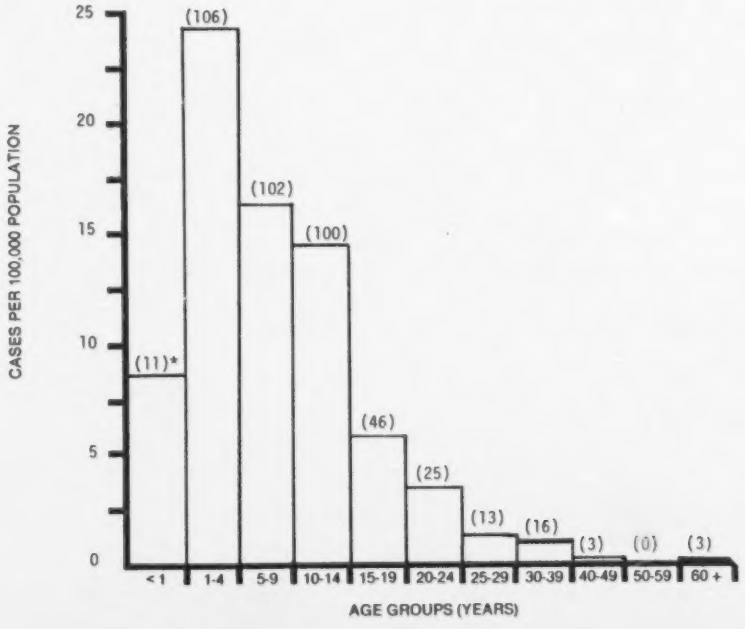
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua	1													1	0.7	2.0
Baker			1											1	6.5	35.7
Bay					1									1	1.0	0.0
Bradford															0.0	0.0
Brevard	1	1	7	3	12	4		1			1			30	10.9	0.6
Broward	2	2	2	1		1		1	3	1		1		14	1.4	16.1
Calhoun															0.0	11.3
Charlotte				1										1	1.7	1.3
Citrus					1									1	1.8	42.8
Clay															0.0	4.9
Collier						2								2	2.3	14.6
Columbia															0.0	2.2
Dade	1	3	8	8	2	4	8	1				5		40	2.4	6.4
DeSoto											1			1	5.2	5.4
Dixie												1		1	12.8	0.0
Duval		2	3	1	1		2				1			10	1.7	1.9
Escambia								1		1				2	0.9	22.7
Flagler															0.0	0.0
Franklin															0.0	0.0
Gadsden															0.0	8.0
Gilchrist															0.0	5.7
Glades															0.0	0.0
Gulf															0.0	0.0
Hamilton															0.0	0.0
Hardee				1										1	5.1	9.3
Hendry				1					1					2	10.7	17.8
Hernando		1												1	2.2	31.2
Highlands															0.0	13.4
Hillsborough	19	18	9	1	1			2	1	1	1	1		54	8.3	6.9
Holmes		1		1										2	13.5	45.2
Indian River					1								1	2	3.3	64.1
Jackson															0.0	4.3
Jefferson			1											1	9.3	0.0
Lafayette															0.0	0.0
Lake		1	1	1						1				4	3.8	29.0
Lee															0.0	1.5
Leon		8	27	2	3					1				41	27.4	4.4
Levy															0.0	15.9
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee		4	1	1	1				1					8	5.3	15.7
Marion		2												2	1.6	1.3
Martin		1												1	1.5	4.3
Monroe															0.0	2.4
Nassau	1													1	3.0	0.0
Okaloosa															0.0	0.0
Okeechobee															0.0	0.0
Orange	3	1			2									6	1.3	9.2
Osceola						1								1	2.0	4.2
Palm Beach	2	1		3	4									10	1.7	33.3
Pasco	7	6	4	3	14	2			1			1		38	19.3	14.3
Pinellas	11	2	8	10	12	10						1		54	7.4	1.5
Polk	1	1		4	1			1						8	2.5	2.8
Putnam															0.0	3.7
St. Johns															0.0	1.5
St. Lucie				1										1	1.1	3.8
Santa Rosa															0.0	9.3
Sarasota			1	1	1									3	1.5	0.7
Seminole	4	2										1		7	3.8	4.7
Sumter			1											1	4.1	7.6
Suwanee			1											1	4.5	1.6
Taylor															0.0	0.0
Union															0.0	0.0
Volusia		1	31	39	4			2						77	29.5	2.5
Wakulla															0.0	10.7
Walton															0.0	0.0
Washington															0.0	2.2
STATE TOTAL	53	58	106	83	61	24	10	9	7	5	4	11	1	432	4.4	9.1

*1977-1979 Average rate

MEASLES (RUBEOLA) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980

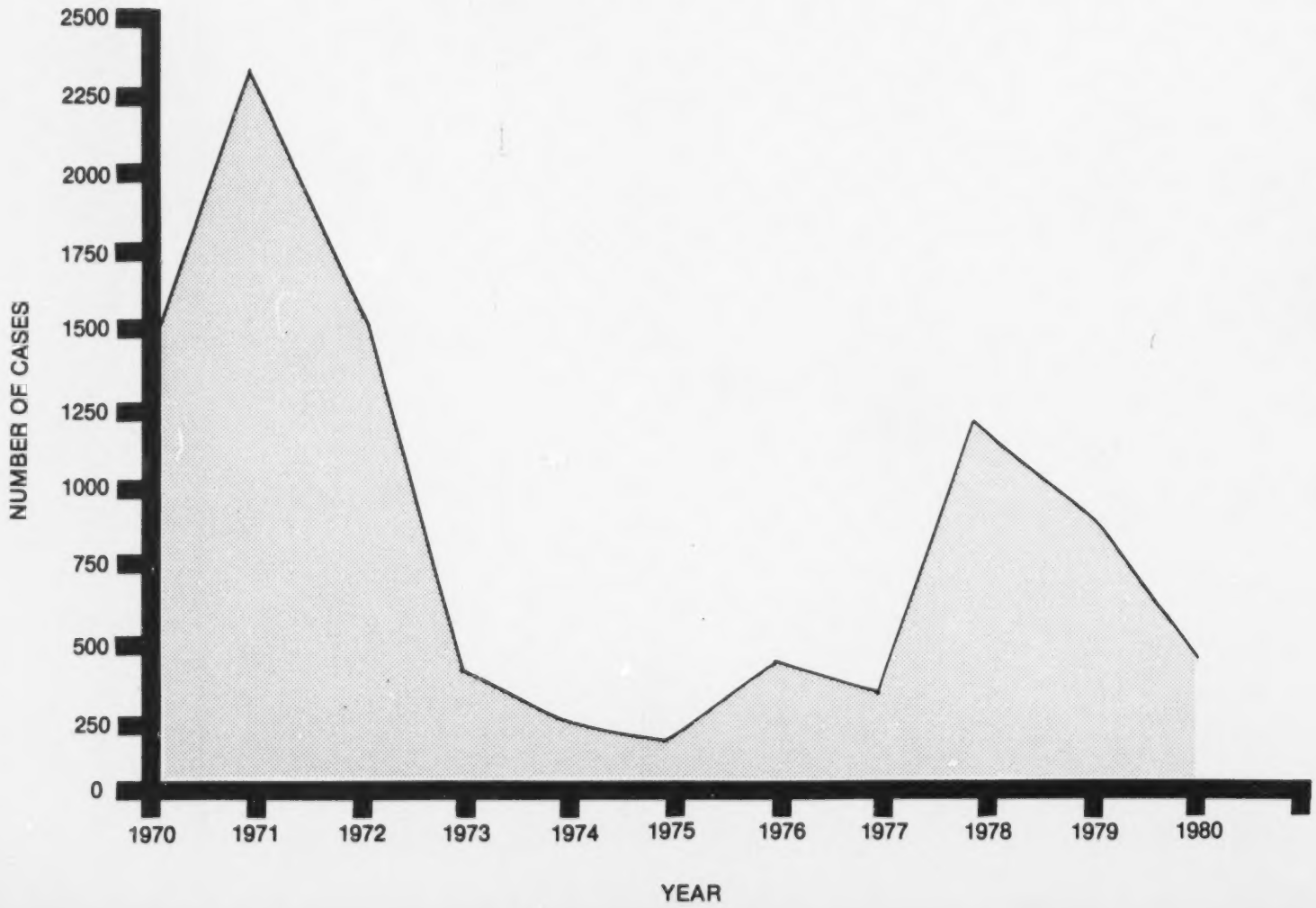


MEASLES (RUBEOLA) - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

MEASLES (Rubeola) · Reported Cases, Florida, 1970-1980



MENINGITIS, ASEPTIC

In 1980, there were 654 cases of aseptic meningitis reported in Florida, a 105% increase from 1979 when 319 cases were reported. The 654 cases reported in 1980 represents a 121% increase from the 3-year 1977-79 mean of 296 cases. The overall state case rate per 100,000 population was 6.7 which is a 97% increase from 1979 (3.4 rate) and a 109% increase from the 3-year 1977-79 mean (3.2 rate). The state case rate was 86% higher than the national rate of 3.6 cases per 100,000 population.

Aseptic meningitis cases were reported from 39 (58%) of Florida's 67 counties. The major population centers in the state accounted for most of the cases. Enteroviruses, which probably accounted for the majority of cases, are identified in most areas of the state. Almost three-fourths of the cases (469) occurred during a 7-month period, March-November. Enterovirus transmission is also most frequent during the spring, summer, and fall. The reasons for the widespread increase of aseptic meningitis cases is probably related to the intensity of enteroviral activity. The large increase in Florida's rate as compared to the national rate also probably signifies a statewide outbreak of enterovirus transmission.

In 1980, the highest age specific incidence rate per 100,000 population was in the less than 1 year age group (123 cases, 94.3 rate). The case rate decreases rapidly with increasing age except for a slight increase in the 25-29 year old age group. This pattern was similar to that seen in 1979. The slight increase in the young adult group may represent parental association with infants and young children.

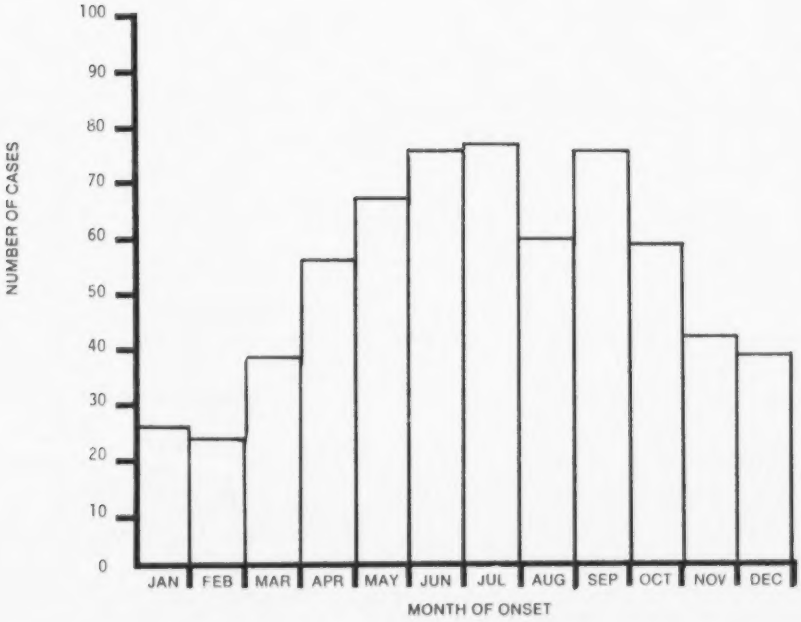
There were slightly more cases reported in males (55%) and all races seemed equally affected. There were no reported outbreaks other than the general increase case reports from many areas of the state.

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

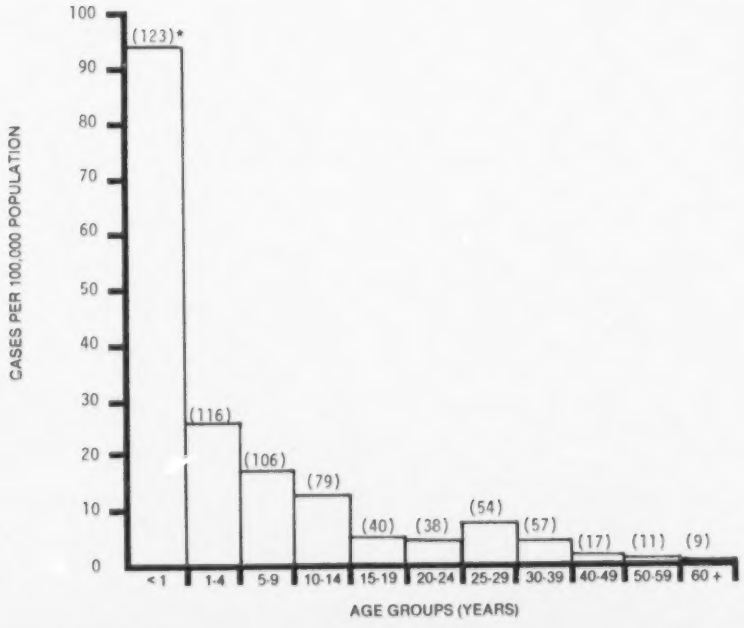
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR.* MEAN
Alachua			1	1	1	1	1	2	1			2		10	6.6	2.4
Baker													1	1	6.5	0.0
Bay								1						1	1.0	1.0
Bradford				1										1	5.0	0.0
Brevard		1			2		1	2	4	2		1	1	14	5.1	2.4
Broward	3		6	5		2	3	3	1	2	1	1		27	2.6	0.8
Calhoun															0.0	0.0
Charlotte															0.0	2.0
Citrus												1		1	1.8	0.8
Clay							1		1					2	2.9	3.7
Collier				2				2	1					5	5.7	2.7
Columbia															0.0	2.2
Dade	1	3	3	10	19	20	18	18	12	12	3	8	4	131	8.0	2.9
DeSoto															0.0	7.2
Dixie															0.0	0.0
Duval	10	6	5	10	5	7	8	9	11	1	3	3	4	82	14.3	8.3
Escambia		1			1				6	1				9	3.8	3.3
Flagler															0.0	0.0
Franklin															0.0	0.0
Gadsden															0.0	0.0
Gilchrist															0.0	0.0
Glades															0.0	5.9
Gulf															0.0	0.0
Hamilton															0.0	0.0
Hardee				1	1									2	10.3	3.7
Hendry															0.0	0.0
Hernando					1									1	2.2	0.0
Highlands															0.0	0.7
Hillsborough	5	3	8	7	8	3	3	2	13	11	14	6	1	84	12.9	3.0
Holmes															0.0	0.0
Indian River													1	1	1.7	12.6
Jackson															0.0	0.9
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake		2					2							4	3.8	6.4
Lee				2	1	4		1	2	3	4		1	18	8.7	1.6
Leon					2		1				1			4	2.7	4.2
Levy						1								1	5.0	0.0
Liberty			1											1	23.4	0.0
Madison															0.0	0.0
Manatee							1					2		3	2.0	2.7
Marion															0.0	1.0
Martin							1							1	1.5	3.1
Monroe															0.0	1.8
Nassau					1		1	2				1		5	15.1	6.3
Okaloosa				1					1	1				3	2.7	0.3
Okeechobee							1			1				2	9.8	0.0
Orange	1		3	1	1	4	5	3	5	6	2	3		34	7.2	6.5
Osceola	1			3	2	2	1	1		1				11	22.0	7.6
Palm Beach	3	1	1	3	6	6	6	2	2	6	5	2		43	7.4	4.5
Pasco							1		1				1	3	1.5	1.5
Pinellas		1	1	1	4	10	15	3	2	4	5	3		49	6.7	1.6
Polk		5	7	7	7	10	2	6	8	4	3	1	3	63	19.4	7.1
Putnam							1							1	2.0	4.4
St. Johns							1					1		2	3.9	5.2
St. Lucie															0.0	0.0
Santa Rosa									1					1	1.8	4.0
Sarasota					1									1	0.5	5.5
Seminole	2			1	3	2	1		3	2	1	1	1	17	9.3	3.1
Sumter															0.0	0.0
Suwanee															0.0	1.6
Taylor															0.0	0.0
Union															0.0	3.2
Volusia			1		1	3	2	3		1		2		13	5.0	2.0
Wakulla			1							1				2	18.2	0.0
Walton															0.0	0.0
Washington															0.0	0.0
STATE TOTAL	26	23	38	56	67	75	77	60	75	59	42	38	18	654	6.7	3.2

*1977-1979 Average rate

MENINGITIS, ASEPTIC - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



MENINGITIS, ASEPTIC - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

MENINGITIS, MENINGOCOCCAL

In 1980, 218 cases of meningococcal meningitis were reported. This is an incidence rate of 2.2 cases per 100,000 population which is unchanged from the preceding year, but is 5% increase above the 3-year mean (1977-79) rate of 2.1. The peak age-specific incidence of reported cases occurred in the $\angle$ 1 year olds (17.6 per 100,000) followed closely by the 1-4 year olds (13.1 per 100,000). These two age groups represent 37% of the total cases reported. The incidence rate by age groups subsequent to the 1-4 year olds remains fairly constant.

Of the 218 reported cases, 109 (50%) were male; 169 (77%) were in whites, 41 (19%) were in blacks and the remainder 8 (4%), the race was not specified.

Meningococcal meningitis cases were reported from 36 (54%) of Florida's 67 counties. There was no definable geographic clustering of cases within Florida; however, Dade County had the greatest number of cases, 55 (25% of the total) with an incidence rate of 3.4. The seasonality of cases was not great, however, 49% of the cases occurred during the winter months, November through March.

For the 218 reported cases, serogrouping was done on 174 (80%) isolates and sulfathiazole-sensitivity was done on 136 (62%).

SEROGROUPING		SENSITIVITY TESTING TO SULFATHIAZOLE			
Group	Number	Sensitive	Resistant	Intermediate	Not Tested
A	1	0	0	0	1 (100%)
B	84	27 (32%)	29 (35%)	14 (17%)	14 (17%)
C	25	7 (28%)	9 (36%)	3 (12%)	6 (24%)
D	1	0	0	0	1 (100%)
Y	3	1 (33%)	1 (33%)	1 (33%)	0
Z	5	1 (20%)	4 (80%)	0	0
W-135	14	0	13 (93%)	0	1 (7%)
Ungroupable	41	19 (40%)	2 (5%)	1 (2%)	19 (46%)
Unknown	44	3 (7%)	1 (2%)	0	40 (91%)
TOTAL	218	58 (27%)	59 (27%)	19 (9%)	82 (38%)

The percent of isolates for which serogrouping was done (80%) is an increase from the (56%) tested in 1979. Serogrouping provides a valuable epidemiologic marker that is very helpful in distinguishing a cluster of related cases from sporadic cases that are only temporally related.

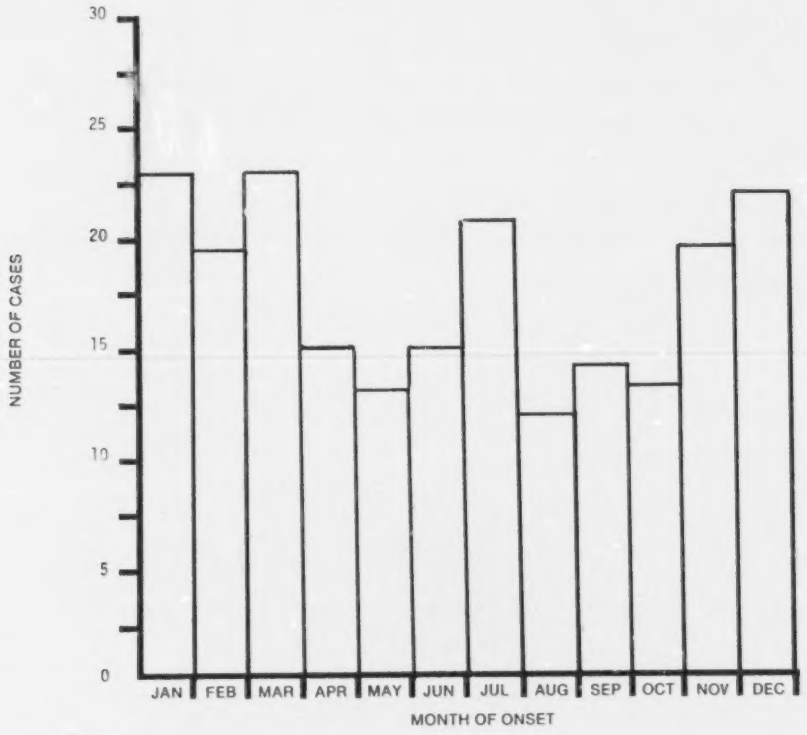
There were no outbreaks of meningococcal meningitis reported in 1980.

MENINGITIS, MENINGOCOCCAL - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

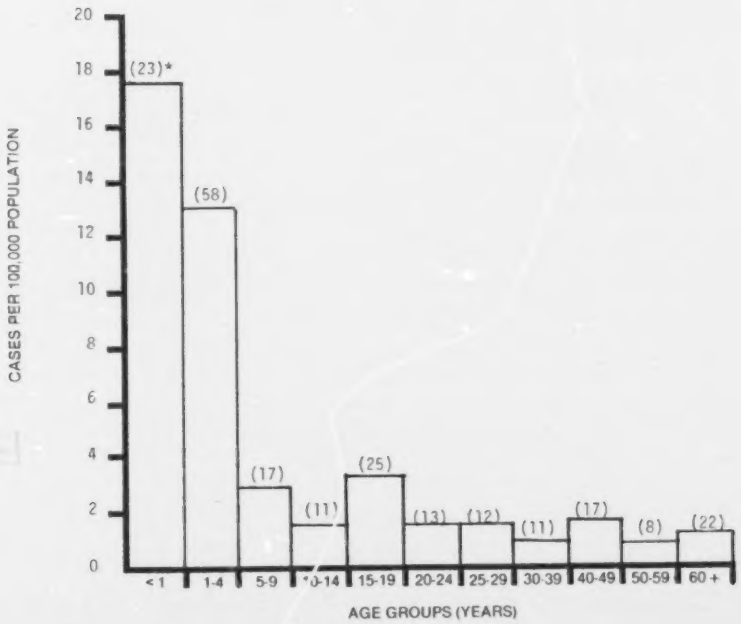
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN *
Alachua							1	1						2	1.3	2.7
Baker															0.0	2.5
Bay	2	1		2	1			1						7	7.1	1.4
Bradford															0.0	0.0
Brevard	1	1				1					1	2		6	2.2	3.6
Broward	1	2	1	1	1	3								9	0.9	0.9
Calhoun				1										1	10.7	0.0
Charlotte															0.0	0.7
Citrus							2							2	3.6	0.8
Clay	1	1												2	2.9	1.2
Collier	2			1							1			4	4.6	4.4
Columbia									1					1	2.8	1.1
Dade	7	1	5	2	2	4	5	6	4	8	5	6		55	3.4	2.3
DeSoto															0.0	0.0
Dixie															0.0	9.1
Duval	2	4	1	1		1	4		1	1	1	1	1	18	3.1	2.2
Escambia										1	1			2	0.9	4.5
Flagler															0.0	7.8
Franklin															0.0	0.0
Gadsden							1				2			3	7.2	0.9
Gilchrist															0.0	5.7
Glades															0.0	0.0
Gulf															0.0	3.0
Hamilton															0.0	3.8
Hardee															0.0	1.9
Hendry															0.0	2.0
Hernando															0.0	0.9
Highlands															0.0	0.0
Hillsborough	3	2	4			1	2		2		1	2		17	2.6	2.0
Holmes															0.0	0.0
Indian River					1								1	2	3.3	1.9
Jackson		1												1	2.5	0.0
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake															0.0	1.4
Lee			1				1	1				1	4	8	3.9	3.6
Leon			1	1						1				3	2.0	3.2
Levy															0.0	0.0
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee		1	1		2		1				1	1	2	9	6.0	0.7
Marion									1					1	0.8	2.6
Martin				1										1	1.5	0.6
Monroe															0.0	1.2
Nassau												2		2	6.0	6.3
Okaloosa												1		1	0.9	0.3
Okeechobee															0.0	1.8
Orange		1	1	2	1	1	2		1			2		11	2.3	2.1
Osceola			1											1	2.0	1.7
Palm Beach	1	1	3		1			3				1	1	11	1.9	2.4
Pasco			1											1	0.5	1.3
Pinellas	1	1	1		1				2	1	1			8	1.1	1.7
Polk				1							2			3	0.9	2.6
Putnam												1		1	2.0	6.6
St. Johns	1		1											2	3.9	2.2
St. Lucie	1			1										2	2.3	1.3
Santa Rosa															0.0	0.7
Sarasota			1	1		2					2			6	2.9	2.7
Seminole					2		1		1	1	1			6	3.3	2.7
Sumter															0.0	3.1
Suwanee															0.0	1.6
Taylor												1		1	6.0	2.2
Union															0.0	0.0
Volusia		2			1	2	1		1			1		8	3.1	2.0
Wakulla															0.0	0.0
Walton															0.0	0.0
Washington															0.0	0.0
STATE TOTAL	23	19	23	15	13	15	21	12	14	13	19	22	9	218	2.2	2.1

* 1977-1979 Average rate

MENINGITIS, MENINGOCOCCAL - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



MENINGITIS, MENINGOCOCCAL - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



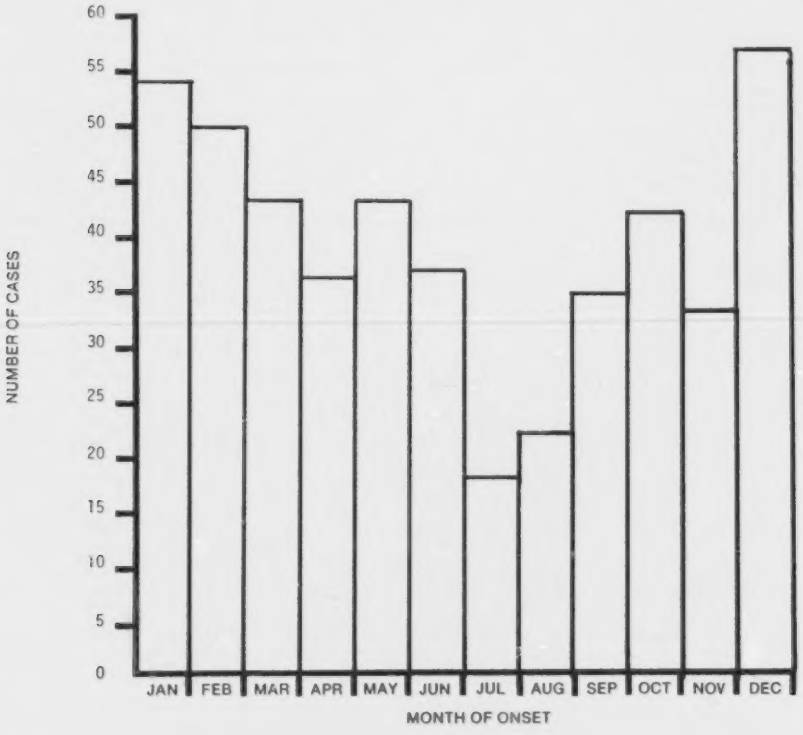
*( ) Reported number of cases

MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

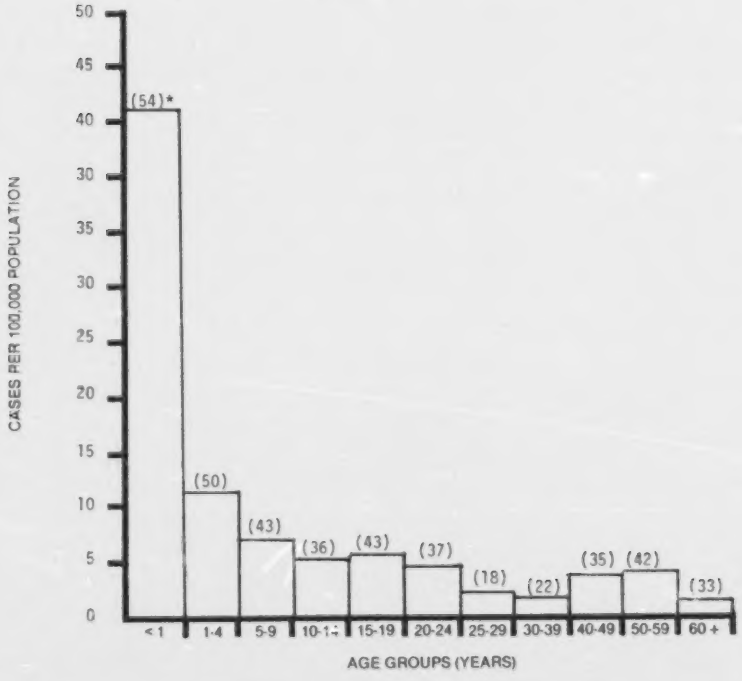
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN*
Alachua	1				2	2	1	1	1		1			9	5.9	1.0
Baker															0.0	0.0
Bay											1			1	1.0	0.3
Bradford			1											1	5.0	0.0
Brevard	3	1	1	3	1	1		1	1		1	3		16	5.8	1.6
Broward	4	5	4	1	2	4		1	3	2	3	1	3	33	3.2	1.4
Calhoun															0.0	0.0
Charlotte	2						1							3	5.0	0.0
Citrus									1		1			2	3.6	0.0
Clay	2													2	2.9	1.8
Collier		1	3	2		2					1			9	10.3	2.2
Columbia											1	1		2	5.6	0.0
Dade	3	3	6	2	8	7		1	1	4	6	2	1	44	2.7	0.6
DeSoto	1									1				2	10.4	0.0
Dixie															0.0	4.5
Duval	9	3	2	7	4	2	2	2	4	7	1	12	1	56	9.8	2.4
Escambia	2	1	2	1	1					1				8	3.4	0.9
Flagler															0.0	11.8
Franklin															0.0	0.0
Gadsden		1			1							1		3	7.2	0.0
Gilchrist															0.0	5.7
Glades															0.0	0.0
Gulf															0.0	0.0
Hamilton															0.0	0.0
Hardee															0.0	0.0
Hendry									1					1	5.3	0.0
Hernando						1				3				4	8.9	1.9
Highlands															0.0	0.0
Hillsborough	3	7	5	3	6	3	2	3	4	3	3	3		45	6.9	2.7
Holmes															0.0	0.0
Indian River		1						1			1		2	5	8.3	4.4
Jackson													1	1	2.5	0.0
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake			1	1	2			1	1					6	5.7	1.4
Lee		1			1			1		2	1	4	3	13	6.3	2.5
Leon				1	2					2		2		7	4.7	2.9
Levy															0.0	0.0
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee															0.0	0.0
Marion		1	3		1	1	2						1	9	7.3	0.6
Martin	2	1	1	3		1				1				9	13.9	4.9
Monroe	1		1			1			3		1			7	11.0	2.4
Nassau															0.0	1.1
Okaloosa															0.0	0.3
Okeechobee				1	1				1					3	14.6	0.0
Orange	5	2	2	1	1	4	4	1	4	3	2	8		37	7.8	2.3
Osceola	1									1				2	4.0	0.0
Palm Beach	5	10	3	4	4	2	2	6	2	4	1	1	1	45	7.8	2.7
Pasco							1			1	1	3		6	3.0	0.7
Pinellas	2	2	3	2	3		1	1	1	1	1	3		20	2.7	1.1
Polk	3	6	2	1		2	1	1		1	3	3	3	26	8.0	2.0
Putnam	2									1		1		4	7.9	1.5
St. Johns												2		2	3.9	3.0
St. Lucie										1	1	1		3	3.4	0.0
Santa Rosa															0.0	0.7
Sarasota		1	2	1	1	4			2	1	1	1		14	6.9	4.9
Seminole	1								2	1	1	1		6	3.3	2.2
Sumter															0.0	0.0
Suwanee															0.0	0.0
Taylor															0.0	0.0
Union										1				1	9.8	0.0
Volusia	2	2	1	2	2		1	1	3			4	1	19	7.3	2.0
Wakulla															0.0	0.0
Walton		1												1	0.0	1.7
Washington															0.0	0.0
STATE TOTAL	54	50	43	36	43	37	18	22	35	42	33	57	17	487	5.0	1.6

* 1977-1979 Average rate

MENINGITIS, OTHER BACTERIAL - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



MENINGITIS, OTHER BACTERIAL - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

RUBELLA

In 1980,there were 109 cases of rubella reported in Florida, a 66% decrease from 1979 when 318 cases were reported. The 109 cases reported in 1980 represent a 55% decrease from the three-year 1977-79 mean of 243 cases per year. The decrease in the number of cases reported in 1980 has reversed the slight upturn seen in 1978 and 1979 and rubella morbidity continues to decline in Florida. The overall state case rate per 100,000 population was 1.1 which is a 68% decrease from 1979 (3.4) and a 59% decrease from the three-year 1977-79 mean (2.7). The national case rate in 1980 was 1.7.

Rubella cases were reported from 32 (48%) of Florida's 67 counties. Hillsborough and Pasco counties (Tampa Bay area) accounted for 27% (29 cases) of the state's total with the remainder of cases scattered throughout the state.

As usual, rubella cases occurred most frequently during the winter and spring months. Sixty-six percent (72 cases) of the reported cases occurred during the first six months of the year.

In contrast to 1978 and 1979, rubella cases were not reported in significant numbers among high school and college age persons. The highest age group specific incidence was reported in the less than 1 year old age group (8 cases, 6.1 rate) and in the 1-4 year old age (38 cases, 8.6 rate). Considering the difficulty in clinically diagnosing rubella, it is possible that some of the cases reported in these infants and young children were rash illnesses caused by other viral agents.

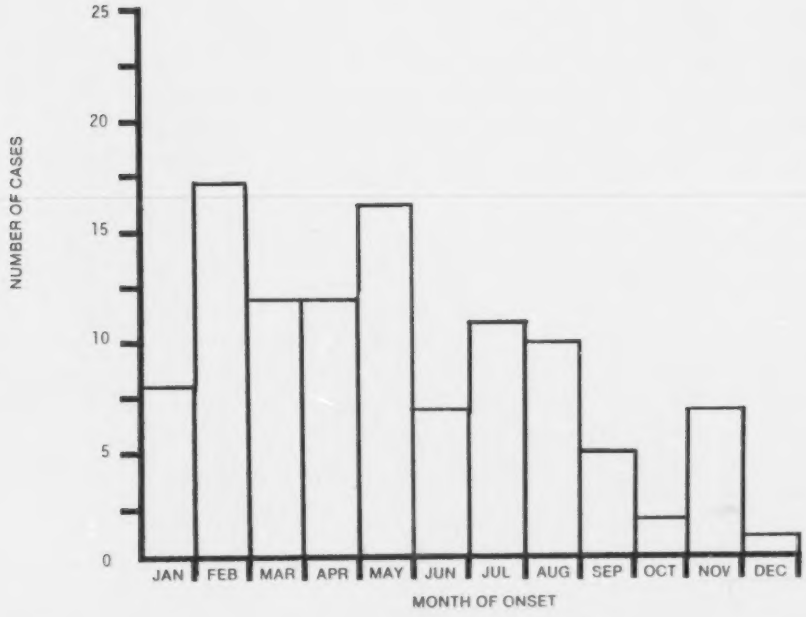
Congenital rubella syndrome is, fortunately, uncommon in Florida. From 1971 through 1978, there were only five cases reported; in 1979, there were four cases; and 1980 two cases. Even though this syndrome is fairly rare at present, the resultant disability of an infected baby and the impact upon the family are considerable. It is probable that these reported cases do not reflect the true incidence of this syndrome inasmuch as some of its less obvious signs are not always identified at birth and, therefore, cases may go undiagnosed and unreported. Maintaining high immunization levels and identifying and immunizing susceptible women of the child-bearing age are essential in the prevention of this disease syndrome.

RUBELLA - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

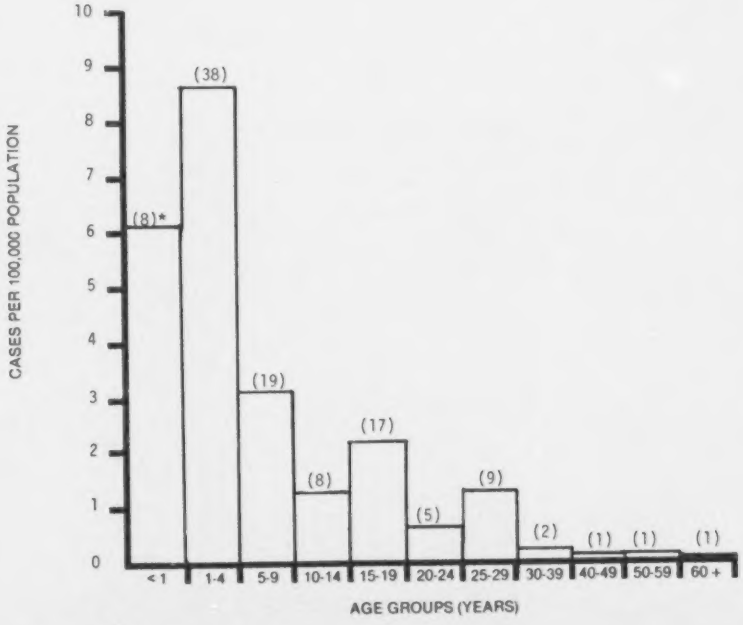
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR* MEAN
Alachua		2		1	1		1							5	3.3	62.2
Baker						1								1	6.5	0.0
Bay		1		2		1								4	4.1	1.4
Bradford															0.0	0.0
Brevard						1					1			2	0.7	0.6
Broward		2	2		1				1					6	0.6	2.8
Calhoun					2									2	21.4	0.0
Charlotte															0.0	0.7
Citrus	1								2					3	5.4	0.8
Clay															0.0	0.6
Collier	1					1								2	2.3	4.4
Columbia		1	1	1										3	8.4	0.0
Dade				1			4	3				1		9	0.6	1.6
DeSoto															0.0	7.2
Dixie															0.0	9.1
Duval			1				2							3	0.5	0.9
Escambia															0.0	1.9
Flagler															0.0	7.8
Franklin															0.0	0.0
Gadsden															0.0	0.9
Gilchrist															0.0	0.0
Glades															0.0	11.8
Gulf					2									2	18.7	0.0
Hamilton															0.0	0.0
Hardee															0.0	1.9
Hendry															0.0	5.9
Hernando	1													1	2.2	0.0
Highlands															0.0	0.0
Hillsborough	5	3	1		2	1		2	1	1	2			18	2.8	3.8
Holmes		1												1	6.7	4.8
Indian River															0.0	1.3
Jackson													1	1	2.5	0.9
Jefferson															0.0	0.0
Lafayette															0.0	0.0
Lake							1	1			1			3	2.8	0.7
Lee															0.0	0.4
Leon															0.0	3.9
Levy															0.0	0.0
Liberty															0.0	0.0
Madison															0.0	0.0
Manatee		1	2		1		1			1	2			8	5.3	2.0
Marion					1			1						2	1.6	0.3
Martin															0.0	1.2
Monroe			1											1	1.6	1.8
Nassau															0.0	1.1
Okaloosa			1											1	0.9	1.5
Okeechobee															0.0	0.0
Orange		1						2						3	0.6	3.8
Osceola															0.0	0.8
Palm Beach		1		2							1			4	0.7	1.0
Pasco			2		6	1	1	1						11	5.6	1.5
Pinellas		2		1					1					4	0.5	1.2
Polk			1											1	0.3	1.3
Putnam															0.0	0.0
St. Johns		1												1	1.9	0.7
St. Lucie															0.0	0.9
Santa Rosa				1										1	1.8	2.0
Sarasota															0.0	0.2
Seminole				1		1								2	1.1	1.1
Sumter															0.0	18.3
Suwanee															0.0	3.2
Taylor				1										1	6.0	0.0
Union															0.0	0.0
Volusia				1			1							2	0.8	0.7
Wakulla															0.0	0.0
Walton		1												1	4.7	0.0
Washington															0.0	0.0
STATE TOTAL	8	17	12	12	16	7	11	10	5	2	7	1	1	109	1.1	2.7

*1977-1979 Average rate

RUBELLA (GERMAN MEASLES) - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



RUBELLA (GERMAN MEASLES) - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

SALMONELLOSIS

There were 2,031 cases of salmonellosis reported in Florida during 1980 which represents a 9.6% increase in reported cases over the preceding year (1,853). The case rate (20.7 cases per 100,000 population) increased only slightly (4%) from 1979 (19.9/100,000). Cases were reported from 58 (87%) of Florida's 67 counties.

Of the reported cases, 980 (48%) were male, 1,027 (51%) female, and 24 (1%) indicated sex unknown. Of the 2,031 cases, 1,510 (74%) were in whites, 312 (15%) were in blacks, while all other race categories accounted for 21 (1%), and 188 (9%) reported cases did not have race indicated.

The age group with the highest incidence rate was the < 1 year olds (329.0/100,000) which was more than twice the incidence of the next higher age group, the 1-4 year olds (157.0/100,000). There was a dramatic decrease in incidence rates in all age groups above the 1-4 year olds. The reason for this lower incidence in older age groups is not known; however, it may be due to truly lower infection rates, lower illness rates following infection, a greater use of diagnostic culturing in infants, or a combination of all these.

There was no geographic clustering of cases in any particular area within the state. Thirty-two (48%) of Florida counties had an incidence rate higher than the national rate (14.9/100,000). As in previous years, there was a seasonal increase in reported cases during late summer.

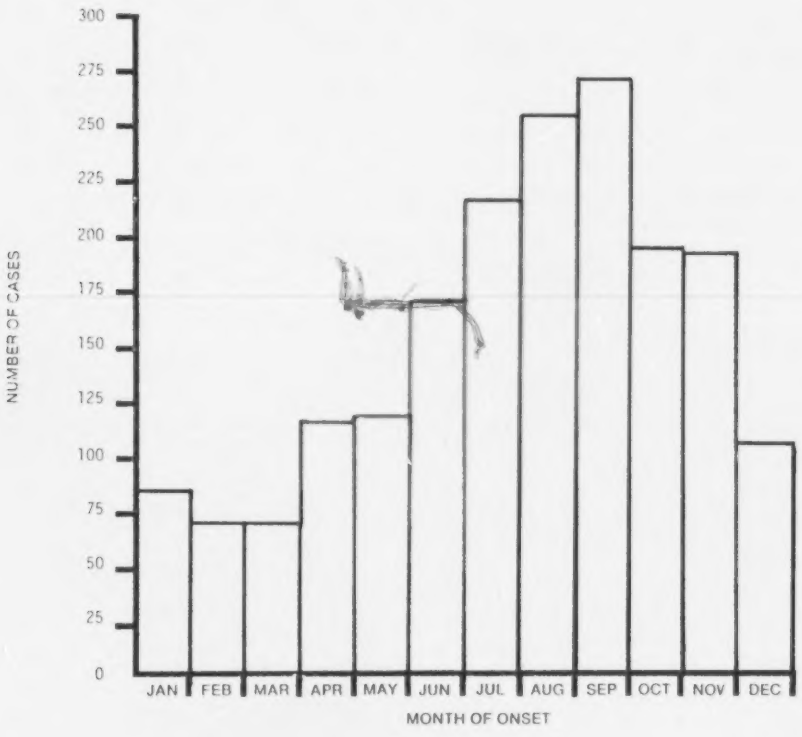
There was one reported outbreak of salmonella this year which occurred in a day care center. No foodborne outbreaks were reported.

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

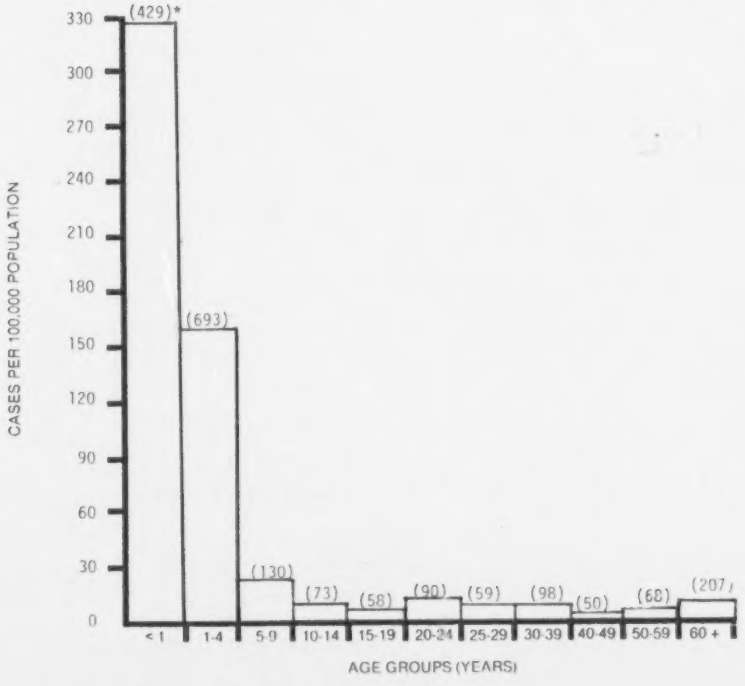
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN*
Alachua	2		5	3			3	1	2	4	3	2		25	16.4	21.5
Baker													2	2	13.0	2.5
Bay						1	4	11	20	7	3	1	4	51	51.9	14.8
Bradford		1												1	5.0	3.9
Brevard	2	3	3	4	3	5	10	17	10	6	7	1	4	75	27.4	25.6
Broward	7	7	6	5	16	5	12	12	16	11	11	6	9	123	12.0	8.5
Calhoun			1				1						1	3	32.1	0.0
Charlotte				1	1	4	4	6	2	1	4	2	2	27	45.1	28.6
Citrus				1			5	1					1	8	14.4	10.7
Clay	1				1	2	4	2	2	2	1		2	17	25.0	12.9
Collier		1		2	3	3	7	4	1	2	3			26	29.9	28.3
Columbia					1							1	2	4	11.2	45.1
Dade	13	5	2	34	24	13	14	25	25	22	28	9	47	261	16.0	17.1
DeSoto				1		1		1		1		1		5	26.1	27.0
Dixie															0.0	0.0
Duval	6	6	2	7	12	41	22	22	40	24	18	11	6	217	37.9	27.2
Escambia	2		3		2		1	4	5	11	8	1	1	38	16.2	13.4
Flagler													1	1	9.0	15.7
Franklin												1		1	13.0	0.0
Gadsden		1			1	1								3	7.2	6.2
Gilchrist															0.0	22.7
Glades															0.0	0.0
Gulf															0.0	12.0
Hamilton							1							1	11.4	38.0
Hardee			1											1	5.1	1.9
Hendry		3							2	1	1			7	37.3	19.7
Hernando			1							1				2	4.4	13.2
Highlands															0.0	2.2
Hillsborough	6	8	1	7	7	11	19	17	19	10	22	9	2	138	21.2	15.4
Holmes															0.0	0.0
Indian River	1	1				1	1						1	5	8.3	4.4
Jackson												2		2	5.1	3.5
Jefferson															0.0	0.0
Lafayette															0.0	7.9
Lake			1				1	1	1	1	1	1		7	6.6	8.8
Lee		4	2	2	2	2	7	5	5	11	7	4	13	64	30.8	15.1
Leon			4	4	2	4	10	15	20	6	6		1	72	48.1	21.1
Levy			1	1	1	1								4	20.0	0.0
Liberty								1						1	23.4	0.0
Madison													1	1	6.7	0.0
Manatee		1	3	1	3	2	2	6	2	3	8	6	1	38	25.4	21.8
Marion			1						1				2	4	3.2	3.2
Martin						1	1	1						3	4.6	4.9
Monroe			1	2	2	2	1	1						9	14.2	10.7
Nassau									3	2	2	1		8	24.1	14.8
Okaloosa	1	1				1	2	1	6	5		2		19	17.2	56.0
Okeechobee			2	1		2	2		2	2	8	1		20	97.6	7.0
Orange	8	3	4	7	6	12	15	13	16	8	6	5	13	116	24.4	19.9
Osceola			1		1	2	2	2	4	3	4		1	20	40.1	20.2
Palm Beach	9	9	6	6	3	10	13	17	8	17	12	8	9	127	21.9	11.3
Pasco	1	1		1		2	2	5	1	2				15	7.6	12.7
Pinellas	7	5	9	13	12	11	11	22	22	17	17	8	3	157	21.4	24.7
Polk	5	3	1	6	5	14	12	5	10	3	9	3	10	86	26.5	20.3
Putnam	1					1	6	5	1			2	1	17	33.4	16.2
St. Johns					1		2	1	1	1	1	1		8	15.4	4.5
St. Lucie	1	2		1	1				2	1				8	9.1	10.7
Santa Rosa			1							1		2		4	7.1	4.6
Sarasota	2		3		3	1	3	11	3	2	3	7	1	39	19.1	19.3
Seminole	6	3	1	3	3	6	5	7	10	7	4	3		58	31.8	22.0
Sumter		1									1			2	8.2	0.0
Suwanee									1					1	4.5	1.6
Taylor						1								1	6.0	4.5
Union							1							1	9.8	6.3
Volusia	3	2	5	3	2	8	11	8	10	2		4	12	70	26.8	20.6
Wakulla						1		1	1	2			1	6	54.5	28.4
Walton															0.0	5.2
Washington								1						1	6.9	6.6
STATE TOTAL	84	71	71	116	118	172	217	252	274	199	198	105	154	2031	20.7	17.1

* 1977-1979 Average rate

SALMONELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORIDA, 1980



SALMONELLOSIS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

SHIGELLOSIS

In 1980, there were 927 cases of shigellosis reported in Florida, a 14.7% increase over 1979 (808 cases). The annual incidence of shigellosis was 9.4 cases per 100,000 population which represented an 8.0% increase over the 1979 rate (8.7). The seasonality for shigellosis showed the usual increase in number of reported cases in the summer months. Forty-eight (71.6%) of Florida's 67 counties reported cases. The highest attack rate (88.1 per 100,000) occurred in children age 1-4 years. The reported incidence among different age groups decreased generally with increasing age except for the 20-29 year age group. This perhaps reflects an increased incidence of shigellosis in parents with young children which may be due to intrafamilial spread. Most cases of shigellosis were due to Shigella sonnei. Of 499 isolates of shigella characterized by the Florida State Laboratories, 426 (85.4%) were S. sonnei, 68 (13.6%) were S. flexneri, 4 (less than 1%) were S. dysenteriae (not typed), and 1 (less than 1%) was S. boydii.

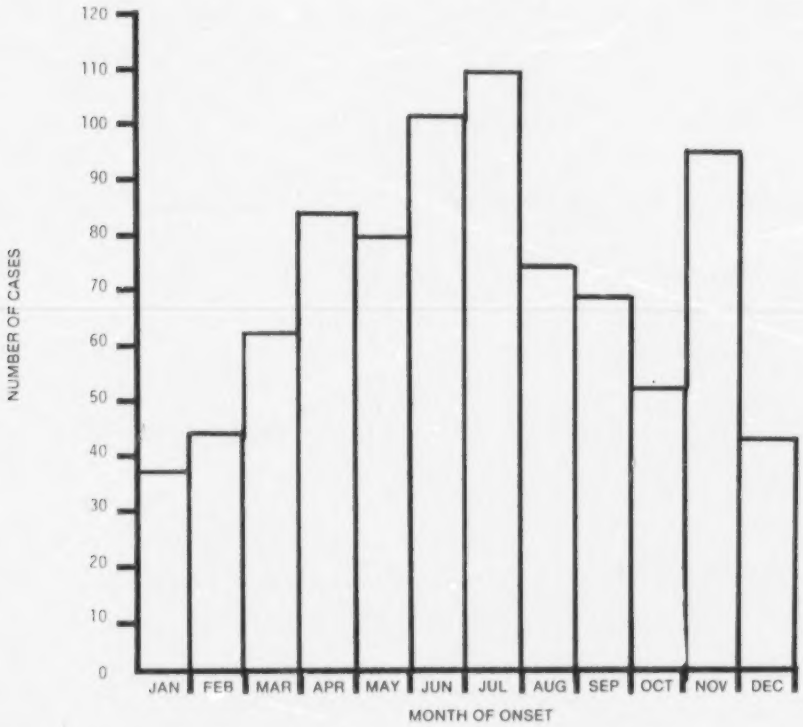
No outbreaks of shigellosis were reported in 1980.

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET AND CASE RATES PER 100,000 POPULATION, BY COUNTY, FLORIDA, 1980

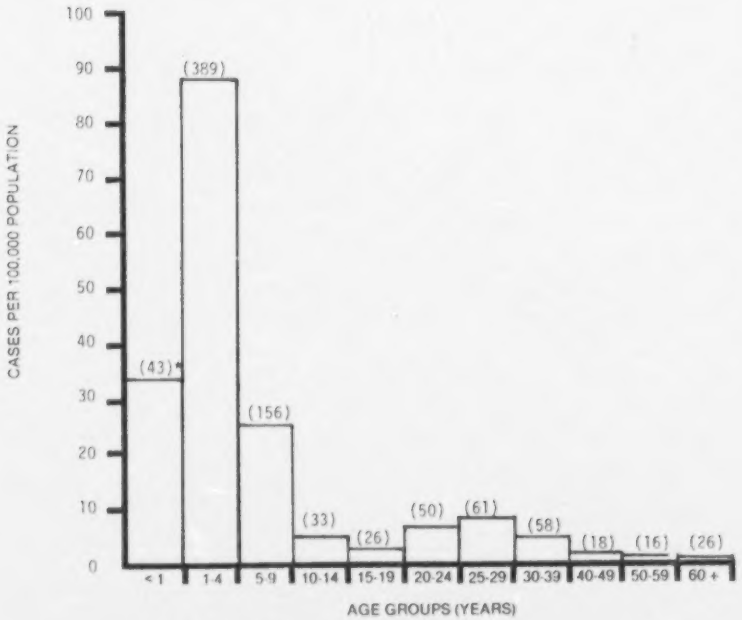
COUNTY	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	UNK	TOTAL	RATE	3-YR. MEAN *
Alachua	1	1								1	6	2		11	7.2	4.7
Baker															0.0	2.5
Bay							1							1	1.0	0.7
Bradford			1											1	5.0	1.9
Brevard	3	2							2	1				8	2.9	5.3
Broward	2	8	5	11	3	2		3	2	3	2	1	2	44	4.3	5.2
Calhoun													1	1	10.7	0.0
Charlotte						1			1					2	3.3	4.7
Citrus	1													1	1.8	7.4
Clay						2		1				3		6	8.8	8.6
Collier										1	1			2	2.3	22.6
Columbia		1												1	2.8	7.7
Dade	3	2	12	17	24	25	38	15	25	19	40	10	35	265	16.2	11.9
DeSoto															0.0	1.8
Dixie															0.0	0.0
Duval	4	3	4	4	2	5	9	6	7	3	4	2	2	55	9.6	11.4
Escambia											1			1	0.4	4.7
Flagler															0.0	3.9
Franklin															0.0	0.0
Gadsden	2	1	1	3		2								9	21.6	3.6
Gilchrist							1							1	17.2	5.7
Glades										1				1	16.5	0.0
Gulf															0.0	0.0
Hamilton															0.0	3.8
Hardee						1								1	5.1	3.7
Hendry	1	1									1	1		4	21.3	25.7
Hernando												1		1	2.2	2.8
Highlands															0.0	0.7
Hillsborough	1	11	5	9	7	3	8	6	10	6	14	9	2	91	14.0	9.3
Holmes															0.0	0.0
Indian River							1							1	1.7	9.4
Jackson															0.0	0.0
Jefferson															0.0	0.0
Lafayette															0.0	7.9
Lake					1					1				2	1.9	1.4
Lee					1		1	2	1	2	1	3	3	14	6.7	12.9
Leon			2	2	10	8	15	7	1	5				50	33.4	10.8
Levy					1	3								4	20.0	0.0
Liberty	2													2	46.7	7.8
Madison															0.0	4.6
Manatee		1	5	1			2	1			2		1	13	8.7	6.4
Marion															0.0	0.3
Martin				2	1	1					1			5	7.7	6.2
Monroe		1	1	1	1	1					1			6	9.5	1.2
Nassau						1			1					2	6.0	10.6
Okaloosa															0.0	0.0
Okeechobee								1						1	4.9	1.8
Orange	1	3	3	4	3	16	7	9	1	2	3	2		54	11.4	16.4
Osceola			1	5	6	14	5				1			32	64.1	4.2
Palm Beach	7	2		1	5	1	2	6	5		1	1	6	37	6.4	7.8
Pasco	2			2			4	1	1		1			11	5.6	4.8
Pinellas		1	1	5	5	1	7	4	7	3	7	3		44	6.0	4.5
Polk	4	5	19	15	7	7	6	12	1	3	5	4	17	105	32.4	8.9
Putnam						1								1	2.0	14.0
St. Johns	1					2						1		4	7.7	3.7
St. Lucie	1		1		2						1			5	5.7	7.7
Santa Rosa															0.0	4.6
Sarasota			1											1	0.5	4.4
Seminole				1		4	2		3	1			1	12	6.6	10.0
Sumter															0.0	0.0
Suwanee	1	1												2	8.9	1.6
Taylor									1					1	6.0	6.7
Union								1						1	9.8	3.2
Volusia							1						5	6	2.3	5.1
Wakulla				1	1						2			4	36.4	0.0
Walton															0.0	0.0
Washington															0.0	2.2
STATE TOTAL	37	44	62	84	80	101	110	75	69	52	95	43	75	927	9.4	8.0

*1977-1979 Average rate

SHIGELLOSIS - REPORTED CASES BY MONTH OF ONSET, FLORDIA, 1980



SHIGELLOSIS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

SECTION 3:

Analysis of Animal Rabies & Zoonotic Diseases

ANIMAL RABIES

In 1980, there were 110 laboratory confirmed cases of animal rabies which represents a 39% increase over 1979 (79 cases) and a 134% increase over 1978 (47 cases). The 110 cases reported in 1980 represents a 10 year high in the number of confirmed cases.

In 1980, there were 4,577 animal species (brain tissue) examined for evidence of rabies infection of which 110 (2.4%) were positive by fluorescent rabies antibody test (FRA). Animal rabies cases were identified throughout the year.

Rabies positive animals were identified in 39 counties in 1980 compared to 34 counties in 1979. Rabies infection appears to "burn itself out" temporarily as the disease decimates susceptible wild animal populations only to reappear when such animals repopulate the area. During the last 10 years (1971-80) rabies has been identified in 62 (93%) of Florida's 67 counties. While the disease has been proven to exist in areas extending from Dade county in the southeast, to Escambia in the western most portion of the panhandle, and to the northeastern areas of Nassau and Duval counties, the greatest preponderence of cases have been identified in the central and north central portion of the state.

The infection rate in 1980(calculated as the percent of total animals examined) is low (0.15%) among dogs and cats combined compared to the relatively high rate (2.1%) of raccoons, skunks, and bats, combined.

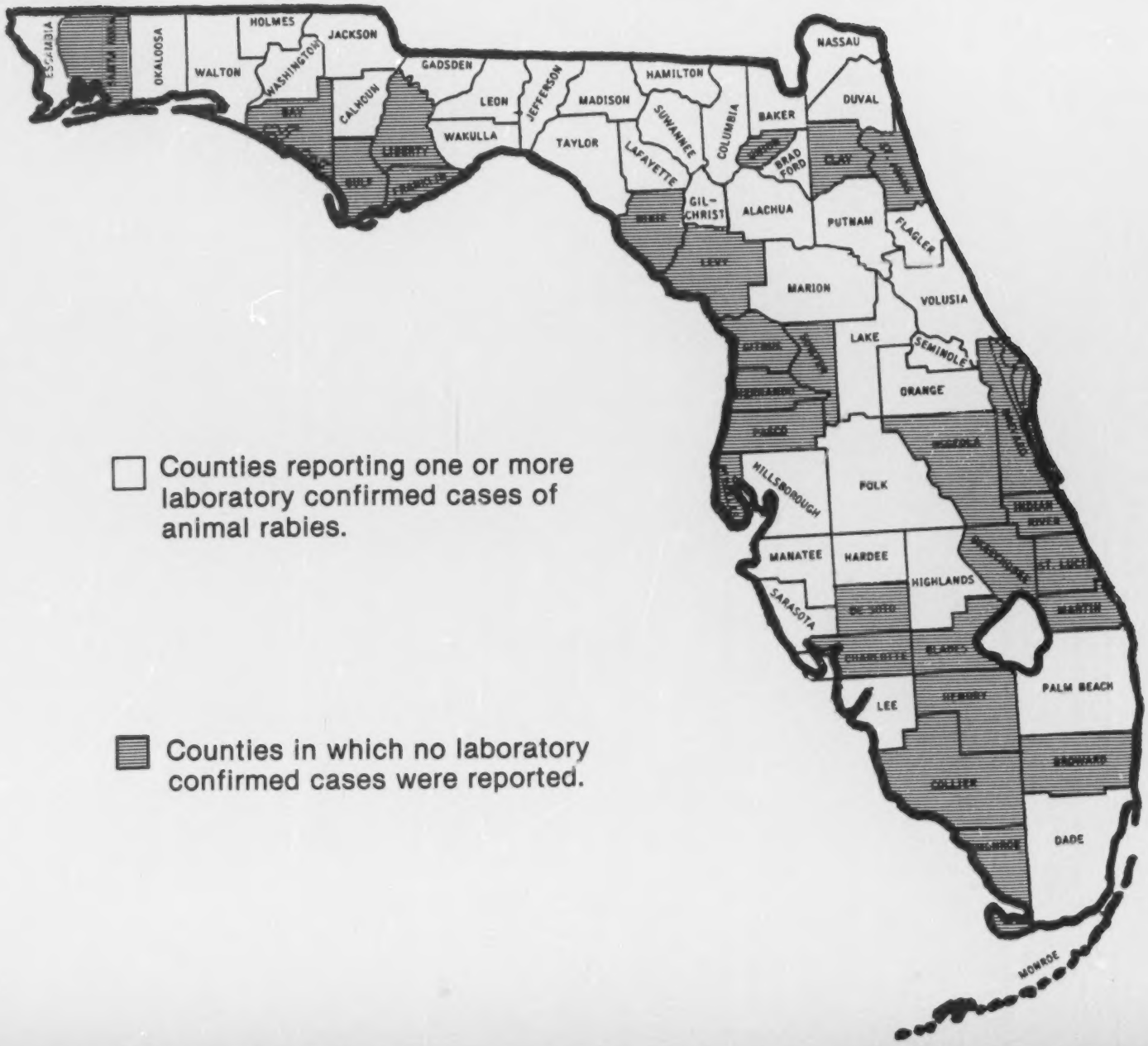
RABIES - LABORATORY CONFIRMED CASES AND SPECIMENS EXAMINED, FLORIDA, 1980

Species	Number Examined	Number and Percent( ) Postive	Percent of All Species Examined (N=4,577)	Percent of All Positive (N=110)
Dogs	1,021	4 (0.4)	22.3	3.6
Cats	1,211	3 (0.2)	26.5	2.7
	2,232	7 (0.3)	48.8	6.4
Raccoons	819	84 (10.3)	17.9	76.4
Bats	182	9 (4.9)	4.0	8.1
Skunks	117	3 (2.6)	2.6	2.7
	1,118	96 (8.6)	24.4	87.3
Fox	130	3 (2.3)	2.8	2.7
Bobcat	6	2 (33.3)	0.1	1.8
Other Wild	262	0 (0.0)	5.7	0.0
	398	5 (1.3)	8.7	4.5
Cattle	18	1 (5.6)	0.4	0.9
Horse	21	1 (4.8)	0.5	0.9
Other Domestic	6	0 (0.0)	0.1	0.0
	45	2 (4.4)	1.0	1.8
Rodents and Lagomorphs	780	0 (0.0)	17.0	0
Humans	4	0 (0.0)	0.1	0
TOTAL ALL SPECIES	4,577	110 (2.4)	100.0%	100%

ANIMAL RABIES -- REPORTED LABORATORY-CONFIRMED CASES, BY COUNTY, BY SPECIES, BY MONTH OF REPORT, FLORIDA 1980

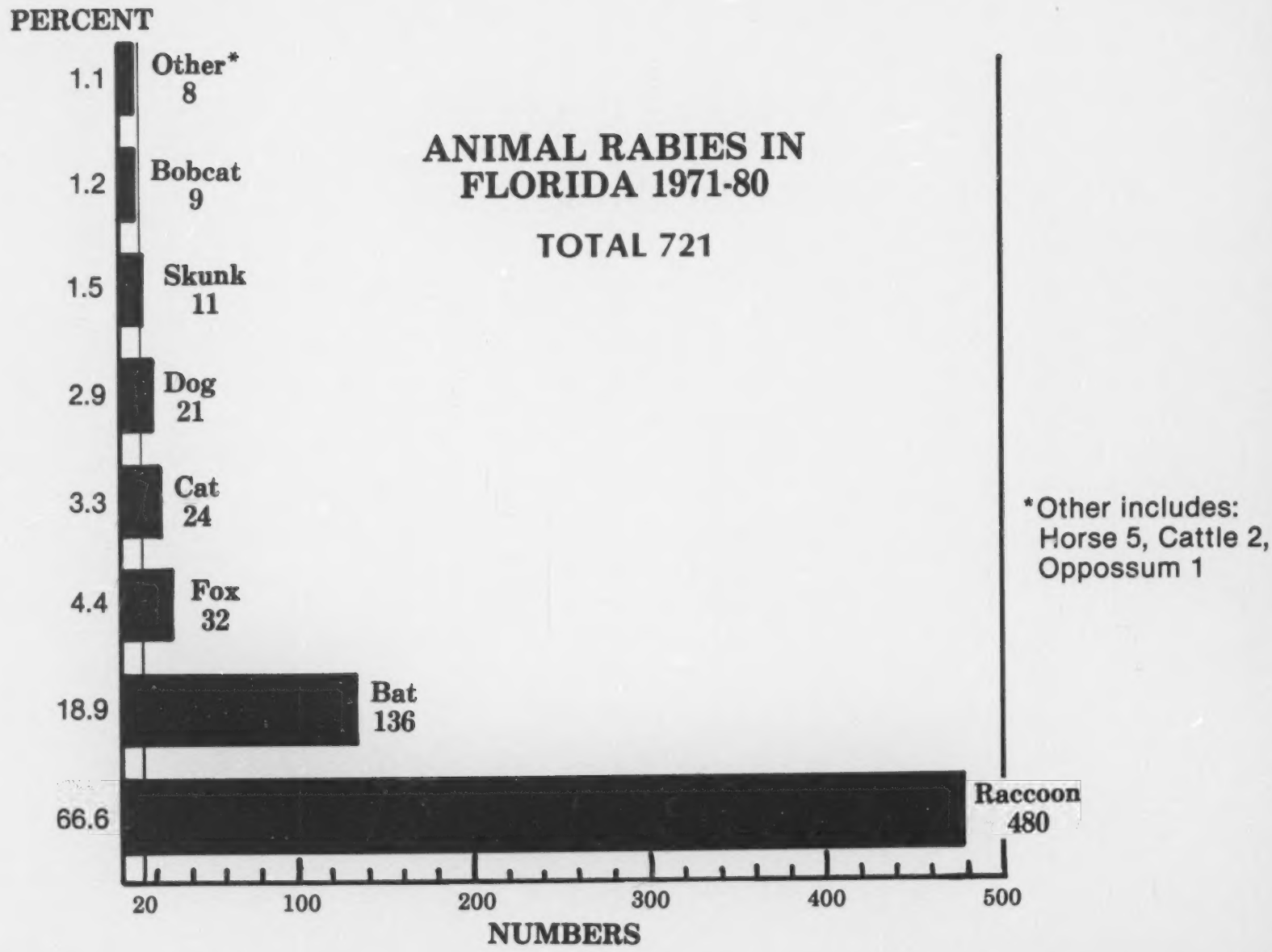
County	January	February	March	April	May	June	July	August	September	October	November	December	Total
Alachua	1 cat 2 rac		2 rac				1 bat	1 bat	2 rac				9
Baker											1 skunk		1
Bay													
Bradford		1 cat				1 rac							2
Brevard													
Broward													
Calhoun					1 rac	1 rac							2
Charlotte													
Citrus													
Clay													
Collier													
Columbia	1 rac	1 rac									1 rac	1 rac	4
Dade							1 fox						1
DeSoto													
Dixie													
Duval	1 rac	1 rac	1 rac				2 rac	1 rac	1 rac	1 rac		1 rac	9
Escambia											1 cat		1
Flagler				1 rac									1
Franklin													
Gadsden						1 rac							1
Gilchrist	1 skunk												1
Glades													
Gulf													
Hamilton		1 rac											1
Hardee			1 rac				1 rac						2
Hendry													
Hernando													
Highlands					1 cow							1 rac	2
Hillsborough							1 bat	1 bat					2
Holmes				1 rac			1 rac					1 rac	3
Indian River													
Jackson					1 fox								1
Jefferson		1 rac		1 dog 1 rac				1 rac					4
Lafayette		2 rac	1 rac									1 rac	4
Lake			1 dog					1 rac		1 rac			3
Lee											1rac/1skunk		2
Leon	1 horse 1 rac	2 rac	1 rac	2 rac	2 rac				2 rac	1 rac	1 rac		13
Levy													
Liberty													
Madison				1 rac				1 bat 1 rac					3
Manatee						1 bat							1
Marion						1bobcat	1 rac					2 rac	4
Martin													
Monroe													
Nassau												1 rac	1
Okaloosa				1 rac			1 rac						2
Okeechobee													
Orange												1 rac	1
Osceloa													
Palm Beach											1 dog		1
Pasco													
Pinellas													
Polk								1 bat		1 bat			2
Putnam				1 rac							1 fox		2
St. Johns													
St. Lucie													
Santa Rosa													
Sarasota		1 rac	1 bat 1 rac			1 rac						1 rac	5
Seminole					1 rac								1
Sumter													
Suwannee								1 rac		1 rac	1 rac		3
Taylor		1 rac											1
Union													
Volusia			2 rac			2 rac		1 rac				2 rac	7
Wakulla								1 bobcat					1
Walton					2 rac					1 rac			3
Washington		1 rac							1 rac	1 dog			3
TOTAL	8	12	11	9	8	8	9	11	6	7	9	12	110

Laboratory Confirmed Animal Rabies, Florida 1980



Counties reporting one or more laboratory confirmed cases of animal rabies.

Counties in which no laboratory confirmed cases were reported.


PERCENT
1.1
Other*
8
1.2
Bobcat
9
1.5
Skunk
11
2.9
Dog
21
3.3
Cat
24
4.4
Fox
32
18.9
Bat
136
66.6
Raccoon
480
20
100
200
300
400
500
NUMBERS
ANIMAL RABIES IN
FLORIDA 1971-80
TOTAL 721
*Other includes:
Horse 5, Cattle 2,
Oppossum 1

ANIMAL RABIES · Laboratory confirmed cases by species, Florida, 1971–1980

ANIMAL SPECIES	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971
BAT	9	10	8	16	38	2	5	11	20	17
BOBCAT	2	0	2	1	1	0	0	2	1	0
CAT	3	5	1	2	3	0	0	1	6	3
CATTLE	1	0	0	0	0	0	1	0	0	0
DOG	4	3	1	1	1	2	0	3	5	1
EXOTIC ANIMALS	0	0	0	0	0	0	0	0	0	0
FOX	3	5	1	3	4	0	5	3	4	4
HORSE	1	1	0	0	0	2	0	0	1	0
LAGOMORPHS (includes rabbit, hare & pika)	0	0	0	0	0	0	0	0	0	0
OPOSSUM	0	0	0	0	0	0	0	0	0	0
OTTER	0	0	0	1	0	0	0	0	0	0
RACCOON	84	54	33	69	51	30	39	21	51	48
RODENTS (includes mice, hamsters, guinea pigs, gerbils, squirrels, rats)	0	0	0	0	0	0	0	0	0	0
SKUNK	3	1	1	0	0	1	0	1	1	3
STATE TOTAL	110	79	47	93	98	37	50	42	89	76

ANIMAL RABIES - Reported laboratory confirmed cases by county, Florida, 1971-1980

County	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971
Alachua	9	5	2	3	4		5	4	3	
Baker	1					1			1	
Bay		3	1	2	3			2		12
Bradford	2								2	
Brevard		2		2	8	1	1	3	6	3
Broward				1						
Calhoun	2									
Charlotte		1		1	1				1	1
Citrus				3	1	1	1	2	4	
Clay				1	1	1			1	
Collier		2	2	3			3	1	3	1
Columbia	4	2	2	3	3					1
Dade	1		1	2	1		8	1		
DeSoto		1		1	1				1	3
Dixie							1			
Duval	9	4	2	3	7	1	2	2	3	5
Escambia	1						1		2	
Flagler	1	1				3				
Franklin										
Gadsden	1	4	1		3				4	1
Gilchrist	1				1					
Glades										1
Gulf			1			1				
Hamilton	1	1	1	3	2					
Hardee	2	3		2						1
Hendry						1		1	3	
Hernando							1			1
Highlands	2						1			
Hillsborough	2	5	6	5	11	3	2	5	3	9
Holmes	3	2			3	2	2	1		
Indian River					1					1
Jackson	1	3	1	2	3	1	1	1	1	
Jefferson	4	2			1	1		1		
Lafayette	4	1								1
Lake	3	2				1		1		6
Lee	2	3				1			3	2
Leon	13	5	3	2	3	3		2	4	3
Levy		1	1	1			1	5	6	1
Liberty										
Madison	3		2	1	3		1		3	
Manatee	1	2	1			2	3			2
Marion	4	5		9	1	1	2		1	
Martin								1		2
Monroe										
Nassau	1	1		2	5	2	1	1	1	
Okaloosa	2	2	1	2			1			
Okeechobee									2	
Orange	1	1		3	9	2	1			1
Osceola			2	1	1				2	1
Palm Beach	1							2	1	1
Pasco									1	2
Pinellas										
Polk	2		1	2	1		3		12	4
Putnam	2	1		2	1	1				1
St. Johns			5	3	1	2		1	1	
St. Lucie										
Santa Rosa					1					
Sarasota	5	2	5	21	4	1	3	4	1	6
Seminole	1	1	2	1	5		1			1
Sumter				1						
Suwannee	3	2		2			2			
Taylor	1		1							1
Union							2		2	
Volusia	7		3		6	1		1	6	1
Wakulla	1	2	1						3	
Walton	3	2	1	1	2	2				
Washington	3	2	2			1			1	
STATE TOTAL	110	79	47	93	98	37	50	42	88	76

MOSQUITO-BORNE ENCEPHALITIS

Eastern Equine Encephalitis

There were 4 cases of laboratory-confirmed Eastern Equine Encephalitis (EEE) (4-fold or greater rise and/or fall in hemagglutination inhibition (HI) or complement fixation (CF) antibody titer) reported in 1980. One additional case was reported from Manatee County as confirmed based on clinical, epidemiological, and laboratory data (EEE hemagglutination inhibition (HI) titer of 1:320). This 57 year-old white female became ill on June 23, was hospitalized on June 28 and subsequently expired on July 7.

The first of four laboratory confirmed cases was reported in a 70 year old white male resident of rural Holmes County who had onset of illness on June 6. Of the five reported cases, 3 occurred in June and 2 in August.

Of the five reported cases, three (60%) were males, and four (80%) were white. The age of the cases were 8 months, 4, 4, 57, and 70 years old. All cases were admitted to hospitals with an admitting diagnosis of encephalitis. Predominant symptoms included: fever, headache, coma, disorientation, and lethargy.

The counties of residence of laboratory confirmed cases were Holmes, Escambia, Polk, and St. Lucie.

St. Louis Encephalitis

In 1980, Florida reported 10 laboratory-confirmed human cases of St. Louis Encephalitis (SLE) (4-fold or greater rise and/or fall in hemagglutination inhibition (HI) or complement fixation (CF) antibody titer). The first four cases occurred in residents of Fort Walton Beach, Okaloosa County, during the period July 10 - August 2. This represents the first time any human cases of SLE have been diagnosed and reported from a Florida county located north of an east-west line from Pasco through Lake to Volusia counties.

In addition to the cases reported from Okaloosa County, 6 cases were reported from the following counties: Pinellas (2), Hillsborough (1), Pasco (1), Manatee (1), and Sarasota (1). The last reported case occurred in a 79 year-old white female from St. Petersburg who had onset of illness December 1. Signs and symptoms for the 10 reported cases included: fever, 100%; confusion, 70%; headache, 60%; lethargy, 60%; weakness, 40%; disorientation, 30%; stiff neck, 30%; and vomiting, 30%. All cases were admitted to hospitals; 5 (50%) had an admitting diagnosis of encephalitis, 2 (20%) were admitted with aseptic meningitis, 2 (20%) with viral respiratory illness, and 1 (10%) with heat stroke. There was one death (a 79 year-old female). The median age of the cases was 62.5 years (mean 50.2 years) with a range of 70 years (9-79 years). There were 6 (60%) females; 7 (70%) were white and 3 (30%) were non-white.

In 1980, 30 Florida counties participated in an SLE surveillance system which utilized sentinel chicken flocks. These flocks were established and maintained near populated areas by county health units or mosquito control district personnel and flocks were bled every two weeks for evidence of an

epizootic of SLE prior to SLE virus activity's spilling over into the human population. In South/Central Florida, virus activity was first identified in sentinel chickens on August 21 in Manatee County, more than two weeks before onset of the first human case of SLE (excluding the human cases in Fort Walton Beach where there was no sentinel surveillance system in operation). Significant virus activity was identified in sentinel flocks in Charlotte, Hillsborough, Manatee, Pasco, and Sarasota counties, which correlates well with the residences of the sporadic cases. Counties identifying low levels of virus activity were Brevard, Hendry, Lee, Orange, Palm Beach, and Pinellas.

ZOONOTIC DISEASES

Brucellosis

In 1980, brucellosis continued to be a disease of infrequent occurrence in Florida. There were 7 cases reported in 1980 compared to 11 in 1979, 10 in 1978, 11 in 1977 and 8 in 1976.

Two cases occurred in Alachua and one case each in Calhoun, Citrus, DeSoto, Jackson, and Marion counties. Of the 7 cases, 1 was in the 20-24 age group, 4 were in the 30-39 age group, 1 was in the 50-59 age group and age was unknown in one case. There were 4 males and 3 females. Cases were associated with testing of cattle (1), hunting and butchering wild hogs (1), and with employment in a dairy (1), slaughter house (2), and cattle bleeding operations (2).

Leptospirosis

In 1980, 11 cases of leptospirosis were reported, all of which were confirmed serologically. There were no fatalities. Ten of the cases were males and one was a female.The ages ranged from 4 to 54 with greatest number (4) in the 10-19 year age grouping. There were, by age groups, one in 1-4 group, two in 10-14, two in 15-19, one in 25-29, three in 30-39, one in 50-59, and one in which the age was unknown. All of the 11 persons, except one, gave a history of close contact with animals and/or contact with water that could have been contaminated with rodent, swine, and other animal urine.

The cases were geographically dispersed with two from the south, two from the north, five from the west coast and two from central Florida. The months of July, August, and September accounted for four cases, the other seven were equally dispersed from March through December.

Psittacosis

Psittacosis is a disease of infrequent occurrence in Florida. In 1980, there were five cases reported. Four cases were males, ages: 30, 43, 55, and 67; one female age 55. Three cases occurred in May and June. The others were in April and September. Cases were reported from 4 counties: Hillsborough, reporting two; Lake, Monroe and Pinellas each reporting one case. Three of the five cases had some opportunity to be in contact with birds known to be susceptible to psittacosis. One case was an animal dealer, one a pet shop owner, and one owned a cockatiel. The cockatiel was tested and found to have Chlamydial organisms present. The fourth and fifth cases had no known exposure to psittasine birds.

Rocky Mountain Spotted Fever

In 1980, there were 8 laboratory confirmed (four-fold rise in antibody titer to spotted fever group antigen by indirect fluorescent antibody (IFA) or complement-fixation (CF), or a single high titer of $\geq$ 1:16 by CF, or

$\geq$ 1:64 by IFA in a clinically compatible case) Rocky Mountain Spotted Fever (RMSF) cases reported in Florida in 1980. In addition a "probable case" (a four-fold rise in Proteus OX-19 or OX-2) was reported from Charlotte County. County health units completed case investigations on 6 (75%) of the confirmed cases. All cases occurred between April and September. The month of onset for each case was April (1), May (3), June (1), July (1), and September (2). There was no clustering of cases by age, (range - 5 to 54 years), with cases occurring in the following age groups: 5-9 years (2); 10-14 years (1); 20-24 years (1); 30-39 years (2); and 50-59 years (1). Five (62.5%) of the cases were male, all cases were white and there were no deaths. Of five cases for which there was information pertaining to travel history, 2 (40%) reported travel out-of-state where their infection could have been acquired and 3 (60%) gave no history of travel outside the immediate area in which they lived. These indigenous cases occurred in Gadsden, Leon, and Palm Beach counties. (See Epi-Notes)

The Department of Health and Rehabilitative Services, Laboratory Services, is now using the IFA test on paired sera for laboratory confirmation of suspect RMSF cases. We recommend physicians utilize this test rather than the less-specific and less-sensitive Wiel-Felix (Proteus) test for diagnosis. We also recommend than when RMSF is suspected, and travel to a known endemic area has not occurred, that the diagnosis of atypical measles be considered strongly and that such case by reported promptly.

ZOONOTIC DISEASES - Reported cases by disease, by county, Florida, 1980

DISEASES

	BRUCELLOSIS	LEPTOSPIROSIS	PSITTACOSIS	ROCKY MOUNTAIN SPOTTED FEVER
Alachua	2			
Baker				
Bay				1
Bradford				1
Brevard				
Broward		1		
Calhoun	1			
Charlotte				1*
Citrus	1			
Clay				
Collier				
Columbia				
Dade				
DeSoto	1			
Dixie				
Duval		2		
Escambia				
Flagler				
Franklin				
Gadsden				1
Gilchrist				
Glades				
Gulf				
Hamilton				
Hardee				
Hendry				
Hernando				
Highlands				
Hillsborough		2	2	
Holmes				
Indian River				
Jackson	1			
Jefferson				
Lafayette				
Lake			1	
Lee				
Leon				1
Levy				
Liberty				
Madison				
Manatee				
Marion	1			
Martin				
Monroe			1	
Nassau				
Okaloosa				1
Okeechobee				
Orange				
Osceola		1		
Palm Beach		1		1
Pasco		2		
Pinellas		1	1	
Polk		1		
Putnam				1
St. Johns				
St. Lucie				
Santa Rosa				
Sarasota				
Seminole				
Sumter				
Suwannee				
Taylor				1
Union				
Volusia				
Wakulla				
Walton				
Washington				
STATE TOTAL	7	11	5	9

*Presumptive case

SECTION 4:

Summary of Venereal Diseases

Prepared by Venereal Disease Program
Jack E. Wroten, Chief

GONORRHEA

In 1980, there were 65,437 cases of gonorrhea reported in Florida, a 6.5% increase from 1979. This is the most number of cases ever reported and is the third successive year to show an increase. The number of cases reported is 406 more than the previous record-high of 1975 (65,031 cases) and is 6,594 cases (11.2%) higher than the 1977 level (58,843 cases) when this current upward trend began.

More emphasis is currently being placed on gonorrhea control measures both statewide and nationally. Priorities were established to ensure the investigation and follow-up of persons who had experienced two or more episodes of gonorrhea in the previous three to six months. Program activities were expanded in the area of gonococcal pelvic inflammatory disease (GPID). Priorities were established to enhance the control of penicillinase-producing Neisseria Gonorrhoeae (PPNG), the resistant strain of gonorrhea.

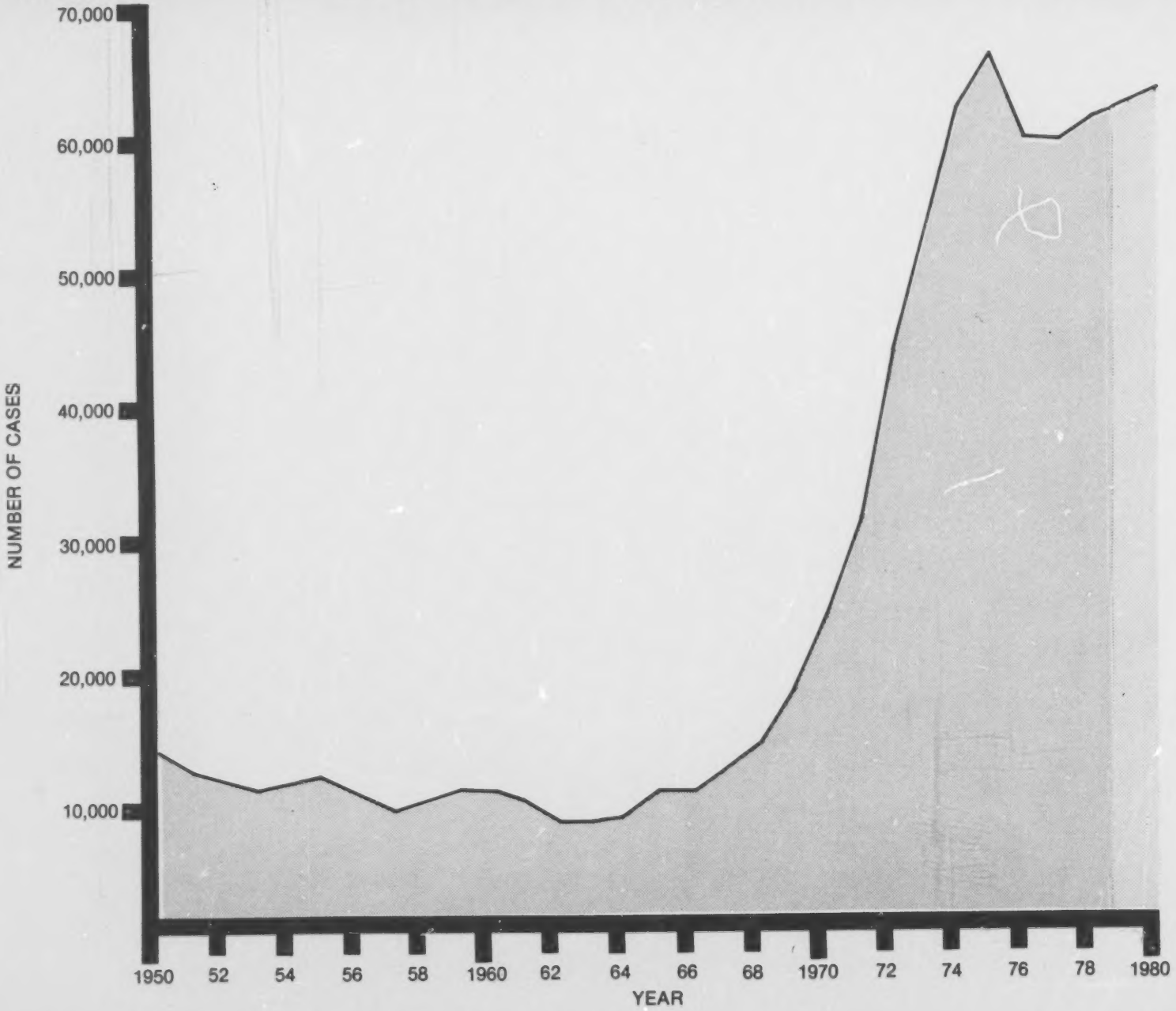
In 1980, after a two-year absence, PPNG cases were reported sporadically around the State. A total of 15 cases were detected and treated in 1980. Twelve occurred in the last four months of the year. Prior to 1980, PPNG cases were detected through a random sampling of gonorrhea isolates and through the routine testing of all isolates from positive tests-of-cure cultures performed on previously treated individuals. To increase the probability of detecting all cases of PPNG, the Central Laboratory Services developed an inexpensive, simple, rapid paper strip method for PPNG testing. Using this test, virtually all positive cultures can be tested for penicillinase production. PPNG production can be determined within a few hours on all positive cultures. This PPNG strip test was used in the latter part of 1980 and will be standard procedure for future years. The timeliness of the PPNG results will permit the rapid identification of this strain of gonorrhea and will greatly assist in the investigation of cases and the control of this infection.

Gonorrhea - Reported Cases By County, Florida, 1979-1980

	1980	1979	% Change
Alachua	1337	1808	-26.1
Baker	50	64	-21.9
Bay	487	379	+28.5
Bradford	54	67	-19.4
Brevard	937	835	+12.2
Broward	6301	5252	+20.0
Calhoun	8	13	-38.5
Charlotte	77	96	-19.8
Citrus	207	67	+209.0
Clay	82	115	-28.7
Collier	555	847	-34.5
Columbia	332	292	+13.7
Dade	13979	12949	+8.0
DeSoto	202	219	-7.8
Dixie	75	81	-7.4
Duval	5502	6336	-13.2
Escambia	2549	2243	+13.6
Flagler	38	12	+216.7
Franklin	11	1	+1000.0
Gadsden	464	366	+26.8
Gilchrist	3	10	-70.0
Glades	5	4	+25.0
Gulf	1	3	-66.7
Hamilton	103	59	+74.6
Hardee	92	31	+196.8
Hendry	124	101	+22.8
Hernando	115	150	-23.3
Highlands	190	29	+555.2
Hillsborough	5618	5255	+6.9
Holmes	5	3	+66.7
Indian River	331	433	-23.6
Jackson	206	145	+42.1
Jefferson	58	56	+3.6
Lafayette	3	1	+200.0
Lake	583	493	+18.3
Lee	1328	1185	+12.1
Leon	2259	2192	+3.1
Levy	14	38	-63.2
Liberty	-	5	-100.0
Madison	114	140	-18.6
Manatee	824	889	-7.3
Marion	383	427	-10.3
Martin	150	119	+26.1
Monroe	688	704	-2.3
Nassau	41	58	-29.3
Okaloosa	430	336	+28.0
Okeechobee	75	68	+10.3
Orange	4668	4223	+10.5
Osceola	240	220	+9.1
Palm Beach	3630	3130	+16.0
Pasco	274	330	-17.0
Pinellas	3969	3274	+21.2
Polk	2230	1365	+63.4
Putnam	110	194	-43.3
St. Johns	120	173	-30.6
St. Lucie	542	523	+3.6
Santa Rosa	54	43	+25.6
Sarasota	752	966	-22.2
Seminole	576	549	+4.9
Sumter	241	186	+29.6
Suwannee	65	57	+14.0
Taylor	101	130	-22.3
Union	-	-	-
Volusia	759	971	-21.8
Wakulla	33	34	-2.9
Walton	45	12	+275.0
Washington	38	46	-17.4
Institutions	-	25	-100.0
State Total	65437	61427	+6.5

(-) Indicates no change in morbidity from prior period

GONORRHEA - Reported cases, Florida, 1950-1980



SYPHILIS

In 1980, there were 4,384 cases of syphilis reported in Florida. The case rate was 44.7 cases per 100,000 population. Compared to 1979, this is a 4.0% decrease in the number of cases (4567) reported and a 9.0% decrease in the case rate (49.1). This is the second straight year for a decrease in the number of reported cases of syphilis and the fifth straight year of decreasing case rates. Of the cases reported, 2,257 (51.5%) were infectious (primary and secondary stages); 1,066 (24.3%) were latent infections under one year's duration (early latent); 1,058 (24.1%) were latent infections over one year's duration (late latent), and 3 (0.07%) were congenital cases in newborn infants.

For primary and secondary syphilis, the number of cases (2,257) and the case rate (23.0) increased for the third consecutive year. Reported cases (2,257) increased 7.5% over last year (2,099 cases) and were 23.5% higher than in 1977 (1,828 cases) when the present increasing trend began. The case rate, however (23.0 per 100,000 population), rose only 1.8% over last year (22.6 case rate).

Both early and late latent syphilis cases as well as case rates during 1980 decreased. Early latent syphilis cases and case rates declined 17.8% and 22.1%, respectively, while late latent cases and case rates declined 9.1% and 13.6%, respectively, over levels reported in 1979.

In 1980, investigation of early syphilis cases (cases under one year's duration - primary, secondary and early latent) resulted in 3,251 cases (97.8% of the total) being located and interviewed for contact identification. Almost 8,000 contacts, or 2.42 per case, were identified and 84% so identified were examined, resulting in 227 additional cases of early syphilis being detected. Forty-three (43%) percent of these contacts were examined within three days of initiation of the investigation. Of contacts examined who were not infected, 92% were treated prophylactically to abort possible incubating syphilis.

There were 3 cases of congenital syphilis reported this year compared to 7 reported last year. All 3 mothers received prenatal care -- two throughout their pregnancy and one had only an initial visit in the first trimester of pregnancy. Each mother had one serology during the term of her pregnancy which is in compliance with the prenatal law; however, it is recommended that a serology be performed during the first and third trimesters especially on mothers with a higher than normal risk of acquiring syphilis.

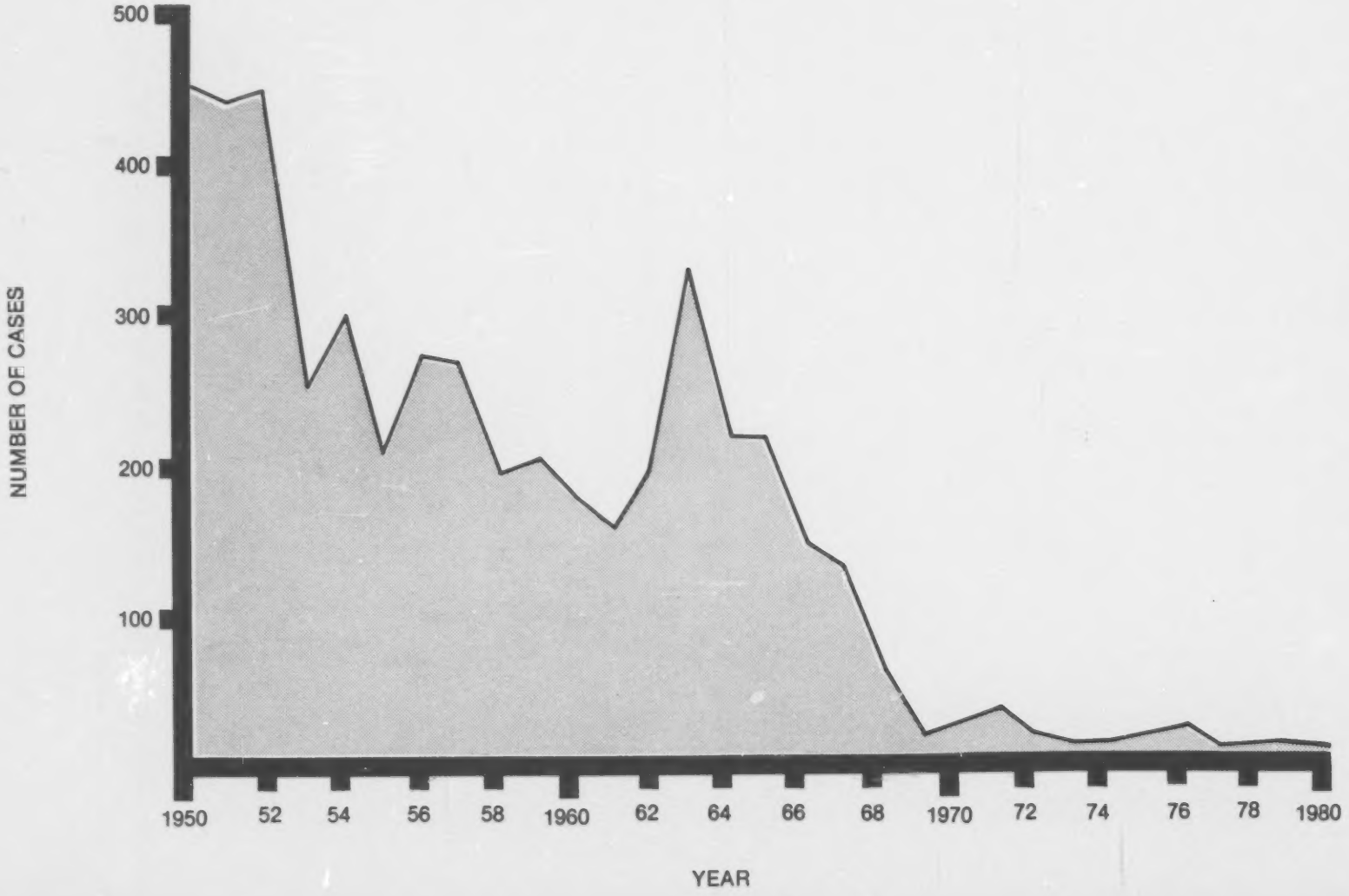
Primary & Secondary Syphilis - Reported Cases
By County, Florida, 1979-1980

	1980	1979	% Change
Alachua	31	42	-26.2
Baker	-	-	-
Bay	4	4	-
Bradford	1	1	-
Brevard	22	31	-29.0
Broward	242	178	+36.0
Calhoun	-	-	-
Charlotte	2	2	-
Citrus	1	1	-
Clay	2	-	*
Collier	26	15	+73.3
Columbia	8	7	+14.3
Dade	596	719	-17.1
DeSoto	6	2	+200.0
Dixie	-	1	-100.0
Duval	77	99	-22.2
Escambia	61	42	+45.2
Flagler	-	-	-
Franklin	3	-	*
Gadsden	4	5	-20.0
Gilchrist	1	1	-
Glades	-	-	-
Gulf	1	-	*
Hamilton	3	2	+50.0
Hardee	-	2	-100.0
Hendry	8	12	-33.3
Hernando	1	4	-75.0
Highlands	3	-	*
Hillsborough	226	324	-30.0
Holmes	-	-	-
Indian River	23	16	+43.8
Jackson	-	3	-100.0
Jefferson	1	1	-
Lafayette	-	-	-
Lake	12	4	+200.0
Lee	40	55	-27.3
Leon	35	32	+9.4
Levy	-	2	-100.0
Liberty	-	-	-
Madison	1	1	-
Manatee	48	27	+77.8
Marion	25	10	+150.0
Martin	7	10	-30.0
Monroe	8	10	-20.0
Nassau	2	3	-33.3
Okaloosa	10	11	-9.1
Okeechobee	2	-	*
Orange	96	68	+41.2
Osceola	1	4	-75.0
Palm Beach	156	65	+140.0
Pasco	4	4	-
Pinellas	108	57	+89.5
Polk	119	61	+95.1
Putnam	7	7	-
St. Johns	52	13	+300.0
St. Lucie	46	42	+9.5
Santa Rosa	-	-	-
Sarasota	68	35	+94.3
Seminole	15	22	-31.8
Sumter	-	4	-100.0
Suwannee	2	1	+100.0
Taylor	2	5	-60.0
Union	5	-	*
Volusia	28	22	+27.3
Wakulla	3	-	*
Walton	-	-	-
Washington	-	2	-100.0
Institutions	2	8	-75.0
State Total	2257	2099	+7.5

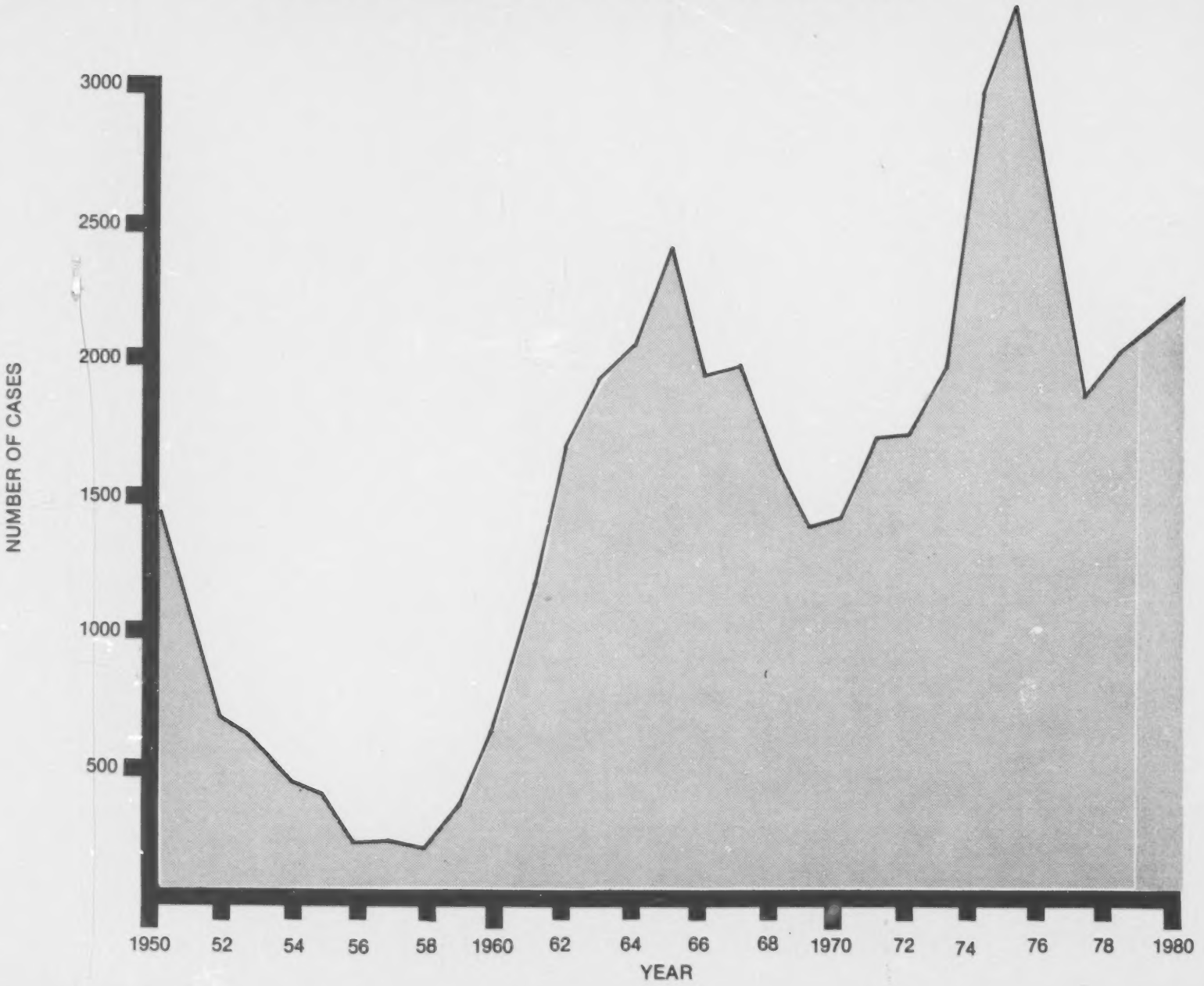
-) Indicates no change in morbidity from prior period.

*) Indicates percent change calculation cannot be made.

CONGENITAL SYPHILIS - Reported cases, Florida, 1950- 1980



PRIMARY & SECONDARY SYPHILIS - Reported cases, Florida, 1950-1980

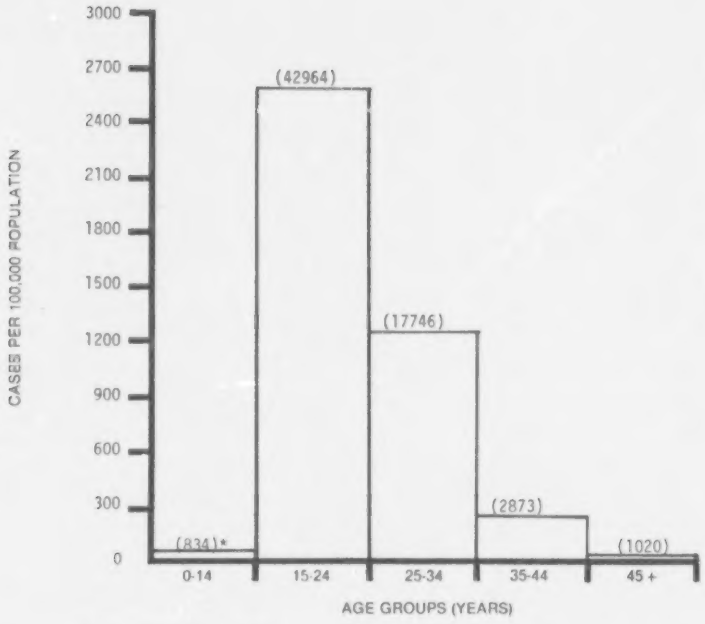


REPORTED SYPHILIS AND GONORRHEA CASES AND RATES PER 100,000 POPULATION, FLORIDA 1957-1980

Year	Population	Total Syphilis		Primary & Secondary		Early Latent		Late & Late Latent		Congenital		Gonorrhea	
		Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates	Cases	Rates
1980	9,813,706	4,384	44.7	2,257	23.0	1,066	10.9	1,058	10.8	3	0.03	65,437	666.8
1979	9,294,250	4,567	49.1	2,099	22.6	1,297	14.0	1,164	12.5	7	0.08	61,427	660.9
1978	8,966,395	4,648	51.8	1,978	22.1	1,350	15.1	1,315	14.7	5	0.06	60,382	673.4
1977	8,717,334	4,543	52.1	1,828	21.0	1,957	22.4	750	8.6	8	0.1	58,843	675.0
1976	8,551,814	5,528	64.6	2,481	29.0	2,154	25.2	874	10.2	19	0.2	58,921	689.0
1975	8,485,230	6,328	74.6	3,228	38.0	1,981	23.3	1,101	13.0	18	0.2	65,031	766.4
1974	8,248,851	5,518	66.9	2,915	35.3	1,624	19.7	966	11.7	13	0.2	61,507	745.6
1973	7,845,100	4,339	55.3	1,946	24.8	1,227	15.6	1,156	14.7	10	0.1	52,582	670.3
1972	7,441,500	3,692	49.6	1,680	22.6	1,189	16.0	807	10.8	16	0.2	43,688	587.1
1971	7,024,600	3,651	52.0	1,675	23.8	1,156	16.5	781	11.1	39	0.6	30,659	436.5
1970	6,841,500	2,983	43.6	1,398	20.4	990	14.5	567	8.3	28	0.4	24,089	352.1
1969	6,651,400	3,147	47.3	1,368	20.6	868	13.0	889	13.4	22	0.3	18,257	274.5
1968	6,468,700	3,615	55.9	1,595	24.7	898	13.9	1,058	16.3	64	1.0	14,331	221.5
1967	6,287,000	4,378	69.6	1,933	30.7	861	13.7	1,456	23.2	128	2.0	12,563	199.8
1966	6,105,900	5,699	93.3	1,890	30.9	972	15.9	2,692	44.1	145	2.4	10,884	178.3
1965	5,924,700	6,132	103.5	2,356	39.8	1,037	17.5	2,527	42.6	212	3.6	10,803	182.3
1964	5,743,000	5,908	102.9	2,005	34.9	1,011	17.6	2,667	46.6	215	3.8	9,402	163.7
1963	5,560,100	6,945	124.9	1,883	33.8	999	18.0	3,742	67.3	321	5.8	8,867	159.5
1962	5,375,600	6,004	111.7	1,632	30.4	1,505	28.0	2,676	49.8	191	3.5	9,902	165.6
1961	5,188,900	5,324	102.6	1,118	21.6	1,561	30.0	2,493	48.0	152	2.9	10,215	196.9
1960	4,999,000	4,115	82.3	639	12.8	1,047	20.9	2,254	45.1	175	3.5	11,122	222.5
1959	4,790,000	4,332	90.4	344	7.2	916	19.1	2,875	60.0	197	4.1	11,172	233.2
1958	4,571,000	3,186	69.7	201	4.4	741	16.2	2,056	45.0	188	4.1	10,329	240.5
1957	4,245,000	5,514	129.9	213	5.0	1,068	25.2	3,971	93.5	262	6.2	9,725	229.1

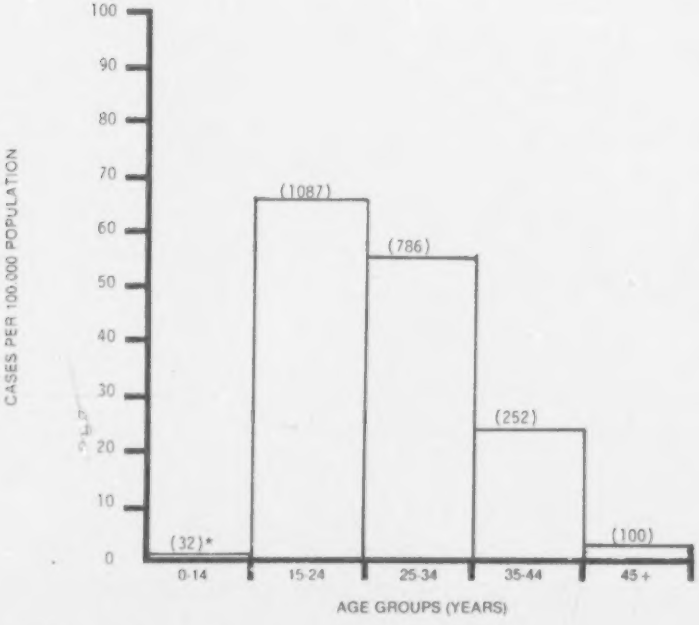
*Beginning in 1978 the early latent syphilis category is limited to latent infections under 1 year's duration. The infections over 1 year's duration are now classified as late and late latent.

GONORRHEA - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



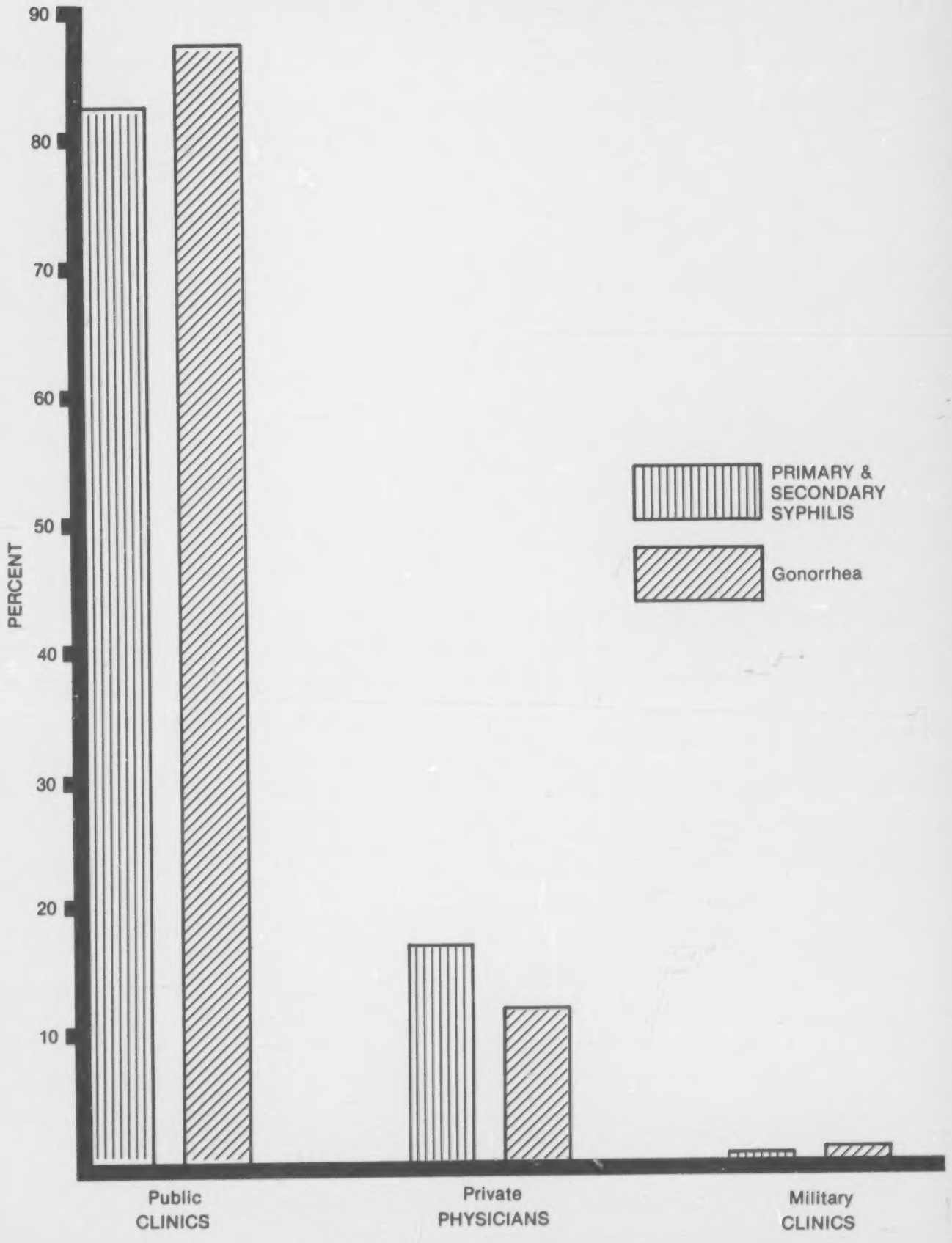
*( ) Reported number of cases

PRIMARY AND SECONDARY SYPHILIS - REPORTED CASE RATES BY AGE GROUP, FLORIDA, 1980



*( ) Reported number of cases

GONORRHEA & INFECTIOUS SYPHILIS - Reported cases by source of report, Florida, 1980



SECTION 5:

Summary of Tuberculosis

Prepared by: Community Tuberculosis Control Services
Clifford H. Cole, M.D., M.P.H., Director

TUBERCULOSIS

Disease Incidence -- Florida and National

There were 1,647 new cases of tuberculosis reported in Florida in 1980. This figure represents a 1.2 percent increase (19 cases) over the 1979 total. The case rate of 16.9 per 100,000 population is 8.2 percent less than the previously reported 1979 rate of 18.4*. This is the third year an increase in reported cases has occurred since 1975 when changes were adopted in the criteria for counting cases. During each of the past 11 years, the case rate of tuberculosis in Florida has exceeded that of the United States. However, in 1980, the United States experienced only a 2.4 percent reduction in case rate as compared to the 8.2 percent reduction in case rate for Florida (Table 1). Despite this reduction, Florida continues to have one of the highest tuberculosis case rates in the United States. According to the latest data available from the Centers for Disease Control, Florida ranks 7th among the 50 states in new tuberculosis case rates for 1980.

Race, Sex, and Age Characteristics

The distribution of reported cases of tuberculosis in Florida by race, sex, and age shows that in 1980 there were almost as many cases occurring among non-whites as among whites. More cases have continued to occur in males than in females and in older than in younger age groups (Table 2). Of the 1,647 cases reported in 1980, 50 percent were among the white population, males accounted for 71 percent of all cases, and 60 percent of cases occurred among persons 45 years of age and over (Figure 1).

Case rates per 100,000 population by these same variables presented in Table 3 also show higher rates occurring in older than in younger age groups and in males than in females. Rates for non-whites are almost six times greater than those for whites. Excluding the youngest and oldest age groups, case rates increase with age, regardless of race or sex, except for non-white females in the 25-44 age group who have a higher case rate than non-white females in the 45-64 age group. The difference in tuberculosis case rates among men and women becomes apparent after 25 years of age and increases progressively until age 65, with the earliest increases and the highest rates occurring among adult non-white males (Table 3).

Bacteriological Confirmation

Of the 1,647 cases reported in 1980, bacteriological results were available at the time of report for 1,544 (93.7%): 1,388 (84.3%) were reported to have positive findings, 156 (9.5%) were negative, and bacteriological results were not reported for 103 (6.2%) (Figure 3).

*Computations for 1980 rates are based on final 1980 Census figures; 1979 rates were computed using estimated population data.

Site of Disease

Pulmonary tuberculosis continues to account for nine out of 10 cases reported (Table 4), a ratio which has remained almost constant in recent years. Extrapulmonary tuberculosis cases, like pulmonary, were found in greater numbers among adults than children. However, proportionately more extrapulmonary tuberculosis occurred in younger age groups. Almost 20 percent of extrapulmonary cases were under 25 years of age, compared with 10 percent of pulmonary cases. Of the 9 extrapulmonary tuberculosis cases reported in children under five years of age, 4 were meningeal, 3 were bone/joint, and 2 were lymphatic.

Geographic Distribution

Morbidity data for Florida by HRS Districts and by counties are presented in Figure 4 and Table 5. District 11 reported the highest tuberculosis case rate for 1980; District 1 reported the lowest. Five counties, namely, Calhoun, Franklin, Gilchrist, Liberty and Union, reported no cases in 1980. Although non-urban counties had higher rates of tuberculosis than urban counties, 55.7 percent of the 1,647 new cases reported in 1980 were found in six city-counties: Miami, Jacksonville, Tampa, St. Petersburg, Orlando, and Ft. Lauderdale.

TABLE 1

Tuberculosis - Reported cases and rates per 100,000 population, United States and Florida, 1970-1980

YEAR	UNITED STATES				FLORIDA			
	Number	Rate	Percent Change Number	Percent Change Rate	Number	Rate	Percent Change Number	Percent Change Rate
1970	37,137	18.3	---	---	1,559	23.0	---	---
1971	35,217	17.1	-5.2	-6.6	1,551	22.1	-0.5	-3.9
1972	32,882	15.8	-6.6	-7.6	1,517	21.0	-2.2	-5.0
1973	30,998	14.8	-5.7	-6.3	1,487	19.3	-2.0	-8.1
1974	30,122	14.2	-2.8	-4.1	1,460	17.7	-1.8	-8.3
1975	33,989	15.9	---	---	1,758	21.0	---	---
1976	32,105	15.0	-5.5	-5.7	1,630	19.4	-7.3	-7.6
1977	30,145	13.9	-6.1	-7.3	1,674	19.8	+2.6	+2.0
1978	28,521	13.1	-5.4	-5.8	1,724	20.1	+2.9	+1.5
1979	27,669	12.6	-3.0	-3.8	1,628	18.4	-5.6	-8.5
1980	27,749	12.3	+0.3	-2.4	1,647	16.9	+1.2	-8.2

NOTE: Case data subsequent to 1974 are not comparable to prior years due to changes in reporting criteria which became effective in 1975.

Data prior to 1975 included only newly-diagnosed cases whereas data subsequent to 1975 includes newly-diagnosed and reactivated cases.

Table 2

TUBERCULOSIS - Reported cases by age, race, and sex, Florida, 1980

Age	Total	White			Non-White		
		Total	Male	Female	Total	Male	Female
All Ages	1,647	829	572	257	818	595	223
0-4	36	8	4	4	28	16	12
5-14	13	6	3	3	7	3	4
15-24	138	40	21	19	98	69	29
25-44	434	138	93	45	296	201	95
45-64	595	321	243	78	274	222	52
65+	431	316	208	108	115	84	31

Figure 1

TUBERCULOSIS - Reported cases by age, race, and sex, Florida, 1980

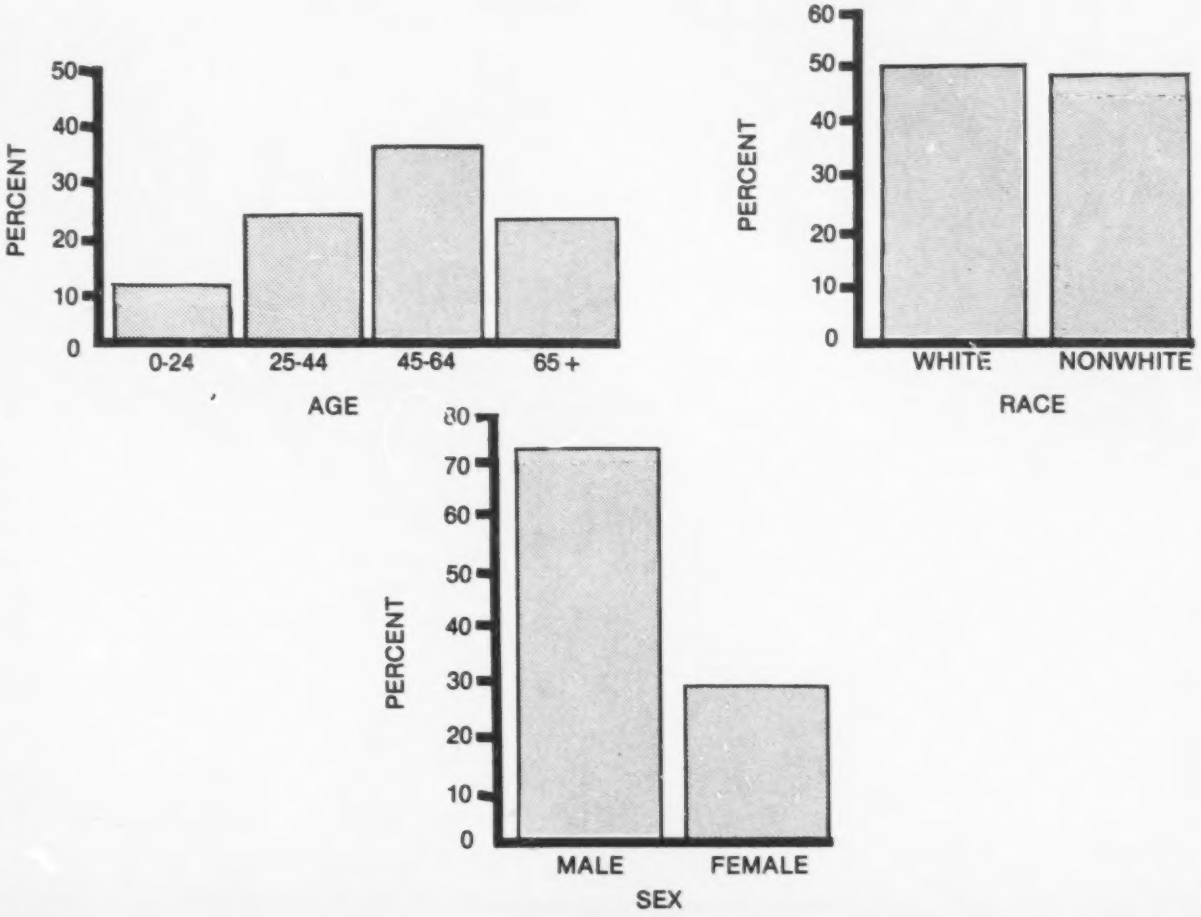


Table 3

TUBERCULOSIS - Reported case rates per 100,000 population
by age, race, and sex, Florida, 1980

	TOTAL	White			Non-White		
		Total	Male	Female	Total	Male	Female
All Ages	16.9	10.3	14.8	6.1	66.9	103.6	34.4
0-4	6.2	1.8	1.8	1.9	19.5	22.3	16.8
5-14	1.0	0.6	0.5	0.6	2.8	2.4	3.2
15-24	9.3	3.3	3.4	3.1	39.0	55.9	22.6
25-44	19.8	7.2	10.0	4.6	102.9	156.3	59.7
45-64	28.6	17.0	28.3	7.6	142.3	261.7	48.3
65+	26.2	20.4	30.1	12.6	120.8	211.1	56.0

Figure 2

TUBERCULOSIS -Reported case rates by
age, Florida, 1980

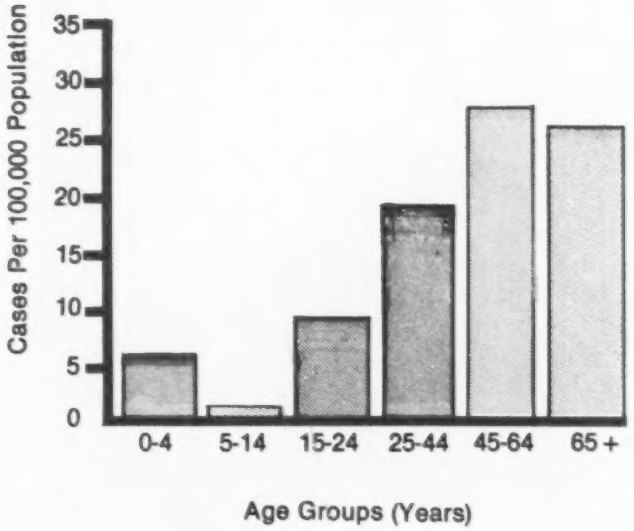


Figure 3

TUBERCULOSIS - Reported cases by bacteriological status at time of report, Florida, 1980

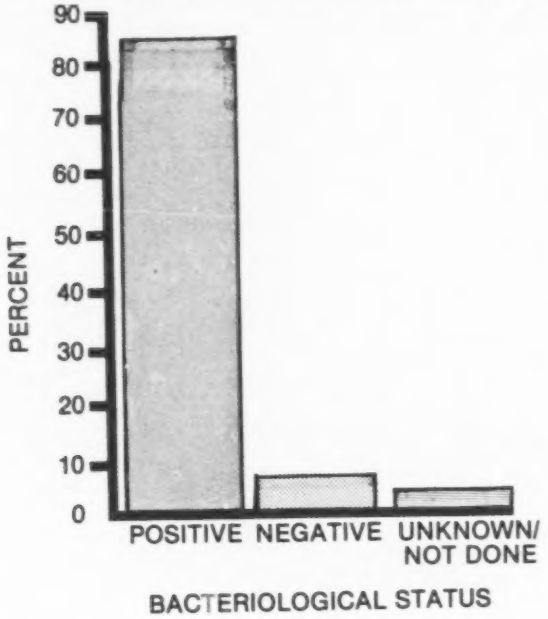


Table 4

TUBERCULOSIS - Reported cases and percent by site of disease, Florida, 1980

Disease Site	Reported Cases	
	Number	Percent
Pulmonary	1,488	90.3
Extra-Pulmonary:		
Pleural	48	
Lymphatic	21	
Bone and/or Joint	16	
Genitourinary	24	
Miliary	13	
Meningeal	9	
Peritoneal	6	
Other	22	
Total Extra-Pulmonary	159	9.7
All Cases	1,647	100.0

Figure 4 **TUBERCULOSIS** - Reported cases and case rates per 100,000 population by HRS district, Florida, 1980

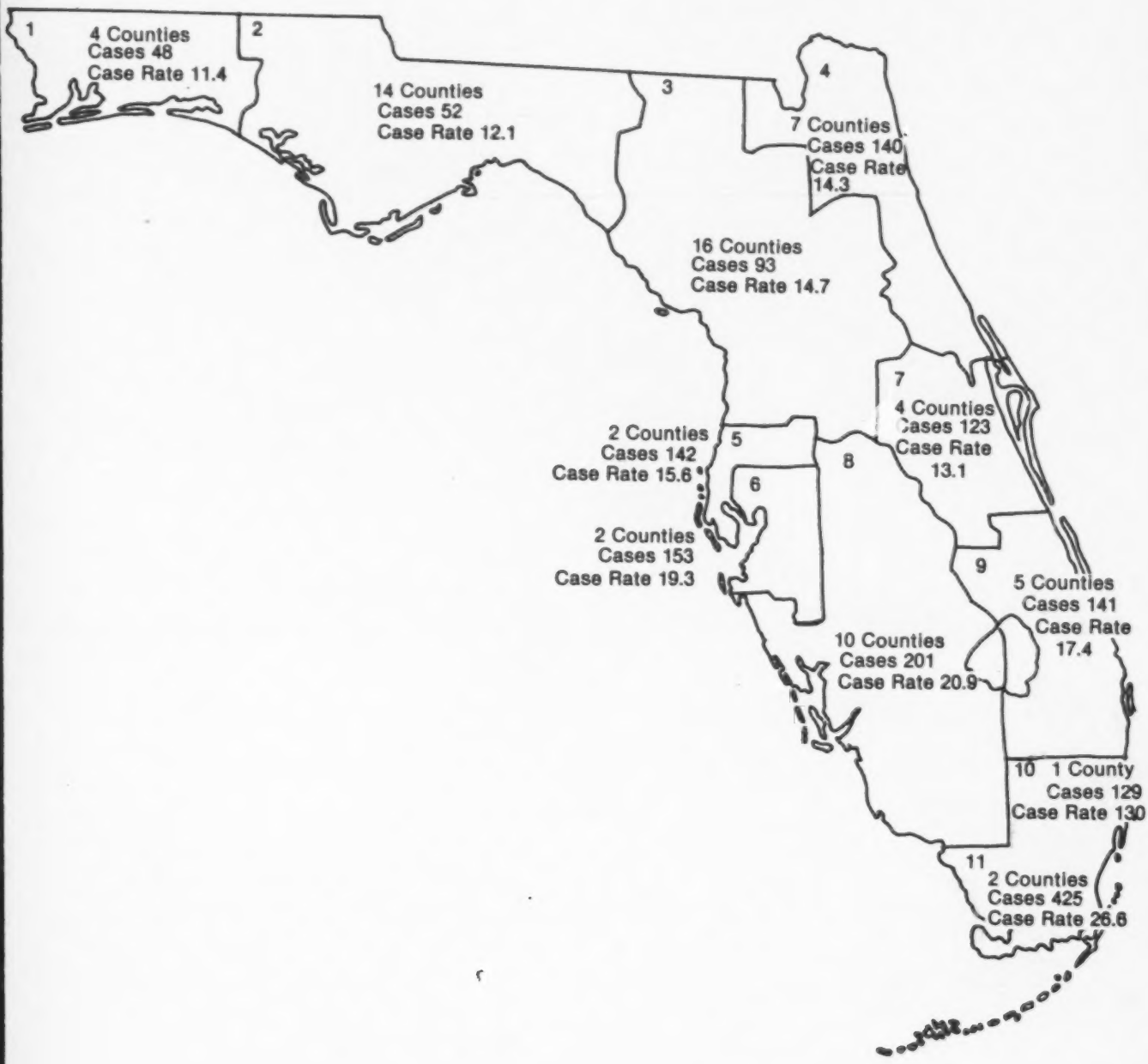


TABLE 5

TUBERCULOSIS - Reported cases and rates per 100,000 population, by rank, by county, Florida, 1980

County	Number of Cases	Rate Per 100,000 Population	Rank	County	Number of Cases	Rate Per 100,000 Population	Rank
Florida	1647	16.9	--	---	---	---	---
Alachua	19	13.6	31	Lafayette	2	44.0	1
Baker	1	7.3	56	Lake	23	23.4	14
Bay	9	9.1	49	Lee	35	17.2	21
Bradford	2	11.4	42	Leon	21	14.9	27
Brevard	21	7.4	55	Levy	2	11.0	43
Broward	129	13.0	34	Liberty	0	----	59
Calhoun	0	----	59	Madison	2	13.5	32
Charlotte	3	5.2	58	Manatee	21	14.4	29
Citrus	5	11.3	41	Marion	10	9.0	50
Clay	5	8.5	53	Martin	5	8.4	54
Collier	29	33.6	4	Monroe	8	13.9	30
Columbia	4	12.5	37	Nassau	2	6.1	57
Dade	417	27.1	10	Okaloosa	10	8.7	52
Desoto	7	35.6	3	Okeechobee	5	24.4	12
Dixie	3	37.8	2	Orange	74	16.6	23
Duval	95	16.7	22	Osceola	8	18.0	19
Escambia	28	11.9	39	Palm Beach	94	16.0	24
Flagler	2	20.6	17	Pasco	30	17.6	20
Franklin	0	----	59	Pinellas	112	15.2	26
Gadsden	5	13.3	33	Polk	85	28.2	7
Gilchrist	0	----	59	Putnam	5	10.8	45
Glades	2	33.2	5	St. Johns	6	12.8	35
Gulf	1	8.9	51	St. Lucie	28	32.7	6
Hamilton	2	23.3	15	Santa Rosa	5	9.7	47
Hardee	2	10.8	45	Sarasota	22	11.0	43
Hendry	2	10.9	44	Seminole	20	12.0	38
Hernando	6	14.6	28	Sumter	5	21.8	16
Highlands	14	27.9	8	Suwannee	5	23.5	13
Hillsborough	132	20.4	18	Taylor	2	13.0	34
Holmes	4	27.8	9	Union	0	----	59
Indian River	9	15.3	25	Volusia	29	11.8	40
Jackson	4	10.3	46	Wakulla	1	10.8	45
Jefferson	1	9.6	48	Walton	5	25.3	11
				Washington	2	12.6	36